

Hi Rich,
Some of the drawings were updated.

There are the following parts to make:

Qty	Number	Rev	Description
3	B02T112041	A	Coupler spindle mount
3	B02T112121	F	Pulley support
3	B02T112142	B	Small drive shaft
3	B02T112153	D	Small shaft
3	B02T112159	-	Outer drive shaft
3	B02T112181	A	Fwd top balancer
3	B02T122210	B	Handle housing
3	B02T122211	A	Handle cover
3	B02T122216	-	Flanged bearing cup
3	B02T122217	-	Flanged seal cup
2	B02T122220	A	Outer motor mount (made by Tom at DFT)

Previously I sent a list of material to be delivered to you. You might be able to use that to make some of these shafts.

Thanks,
Ranny

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Ranny@RespMech.com
636-532-1003 office
314-409-1289 mobil

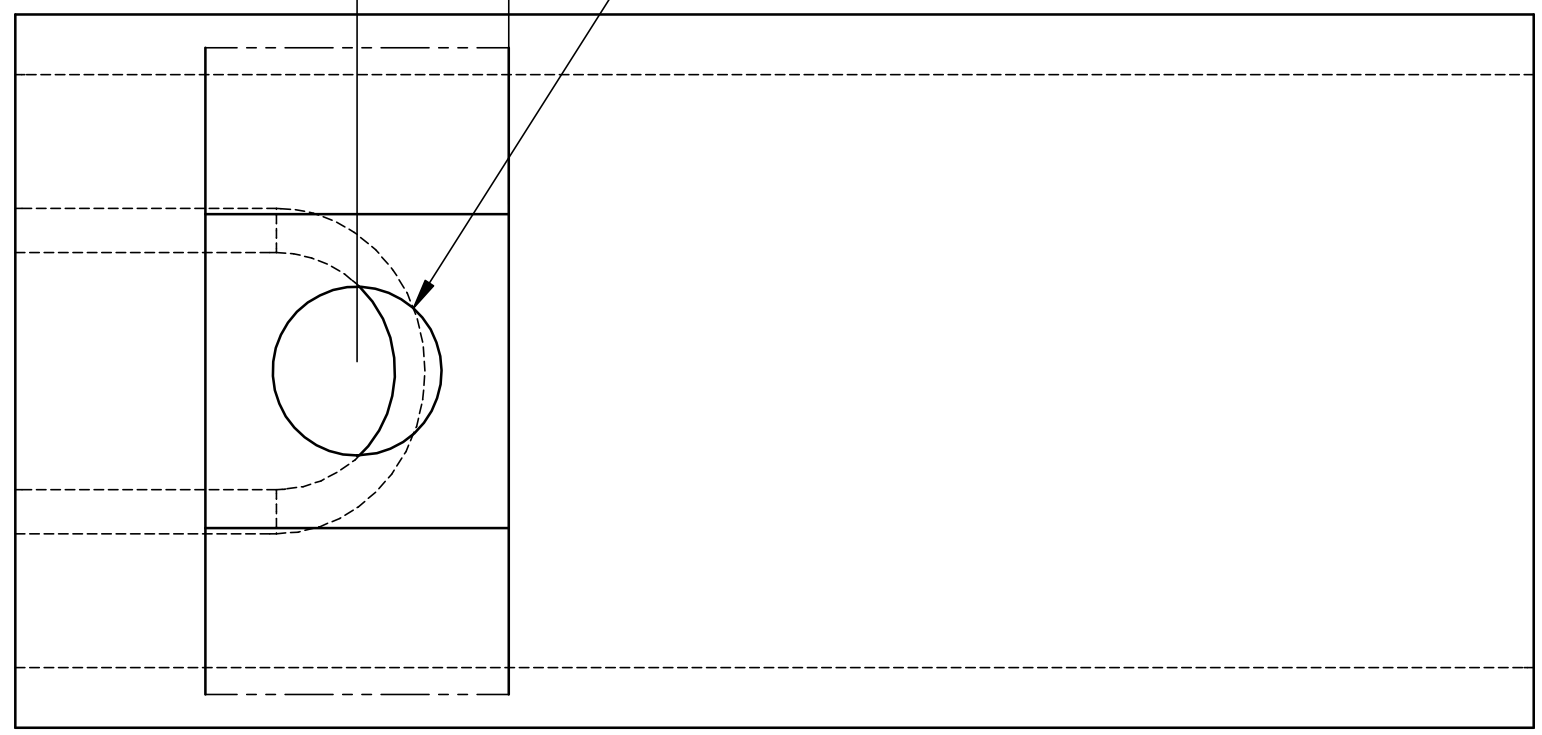
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Cylindrical Fit Reference Only			Pin OD	OD Plus	OD Minus	Max Pin	Min Pin	Hole ID	ID Plus	ID Minus	Max Hole	Min Hole
Class	Range Min	Range Max	0.31250	0.00000	0.00050	0.31250	0.31200	0.31250	0.00010	0.00000	0.31260	0.31250
LC4	0.00000	0.00060										

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

F
E
D
C
B
A

.0800 #4-40 Thread



.1600 .5400

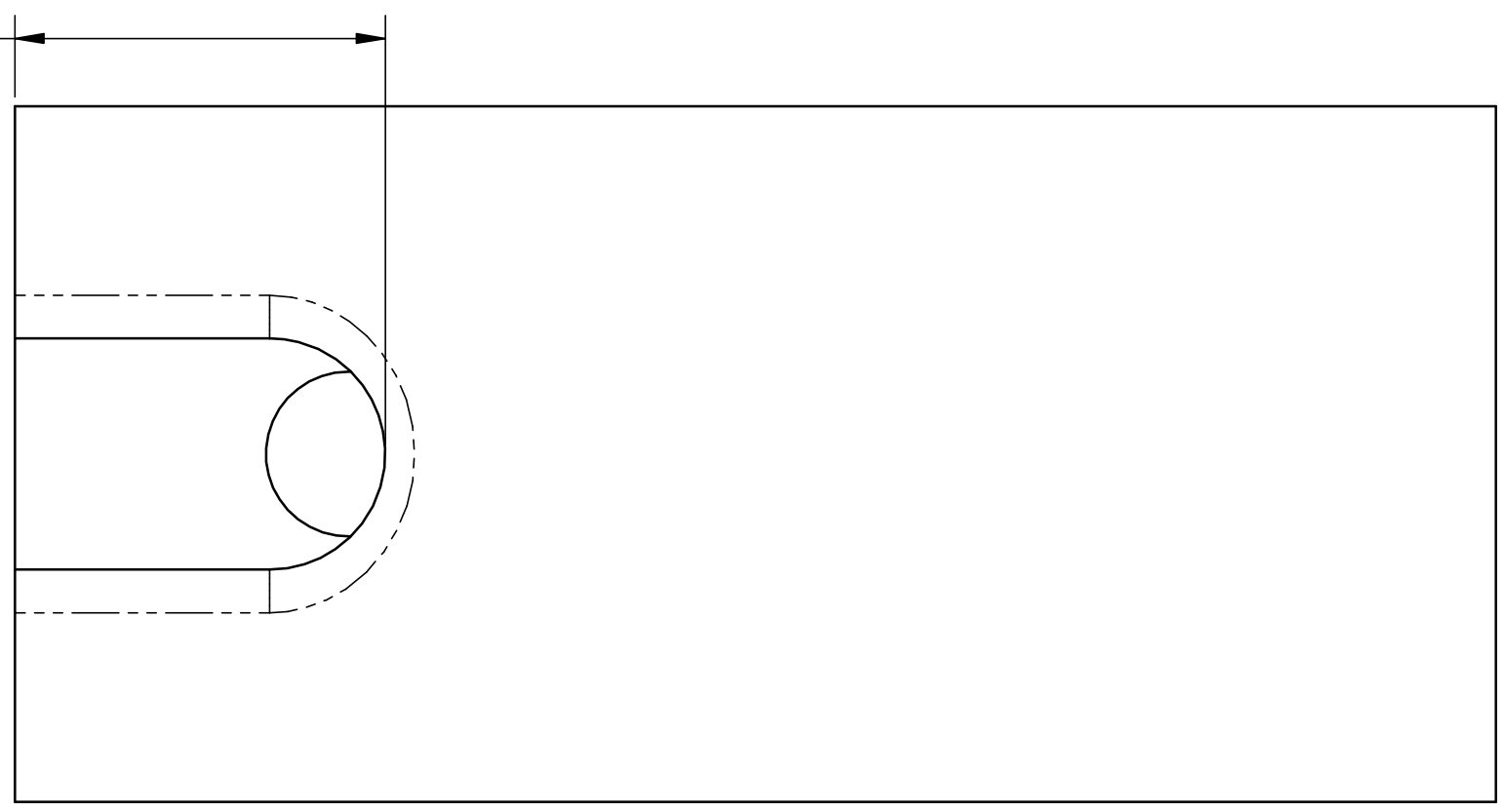
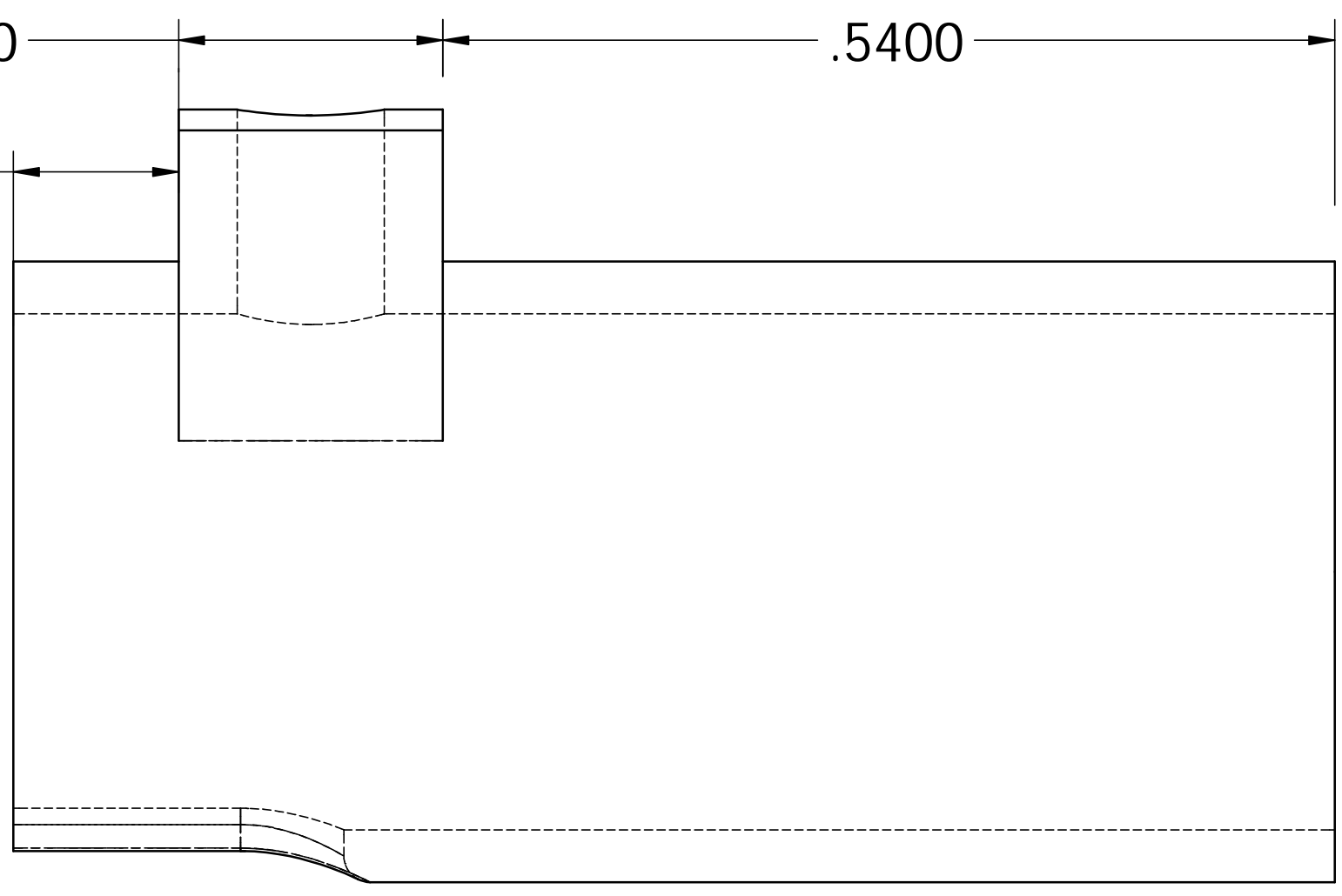
.1000

$\phi .3125^{+.0001}_{-.0000}$

$\phi .3760 \pm .0004$

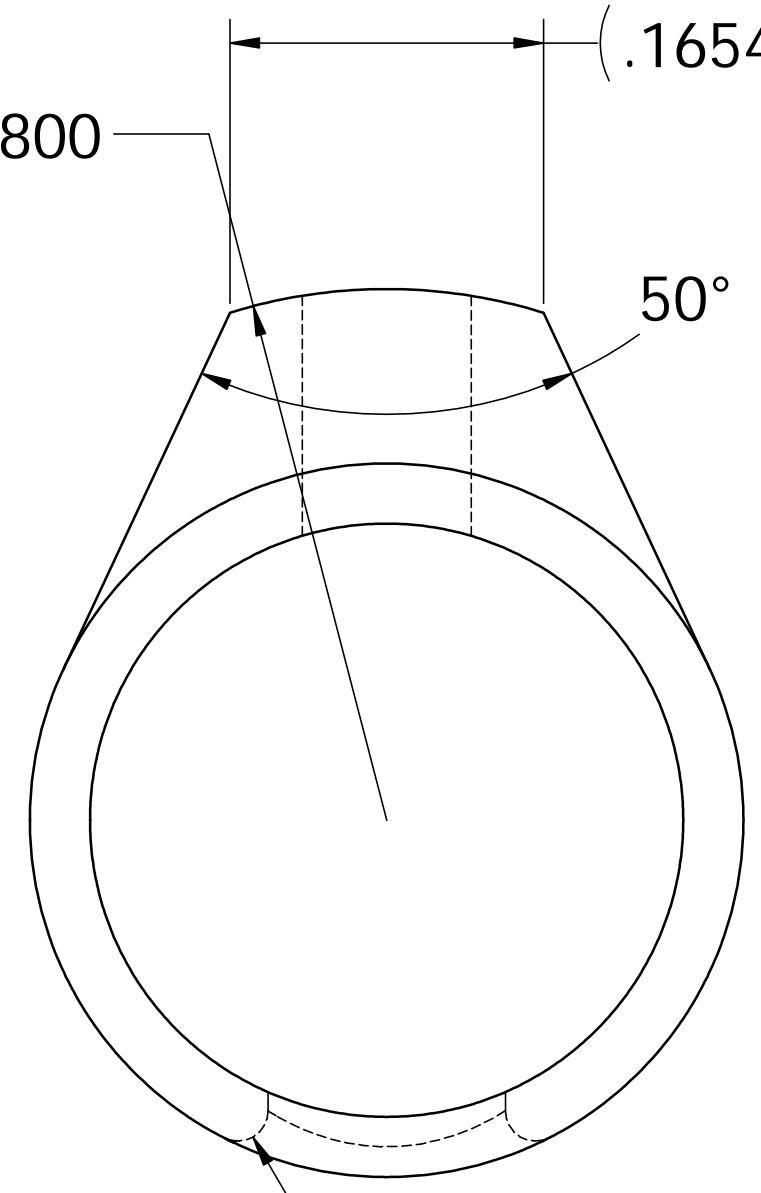
.2000

.1250



R.2800 (.1654)

50°



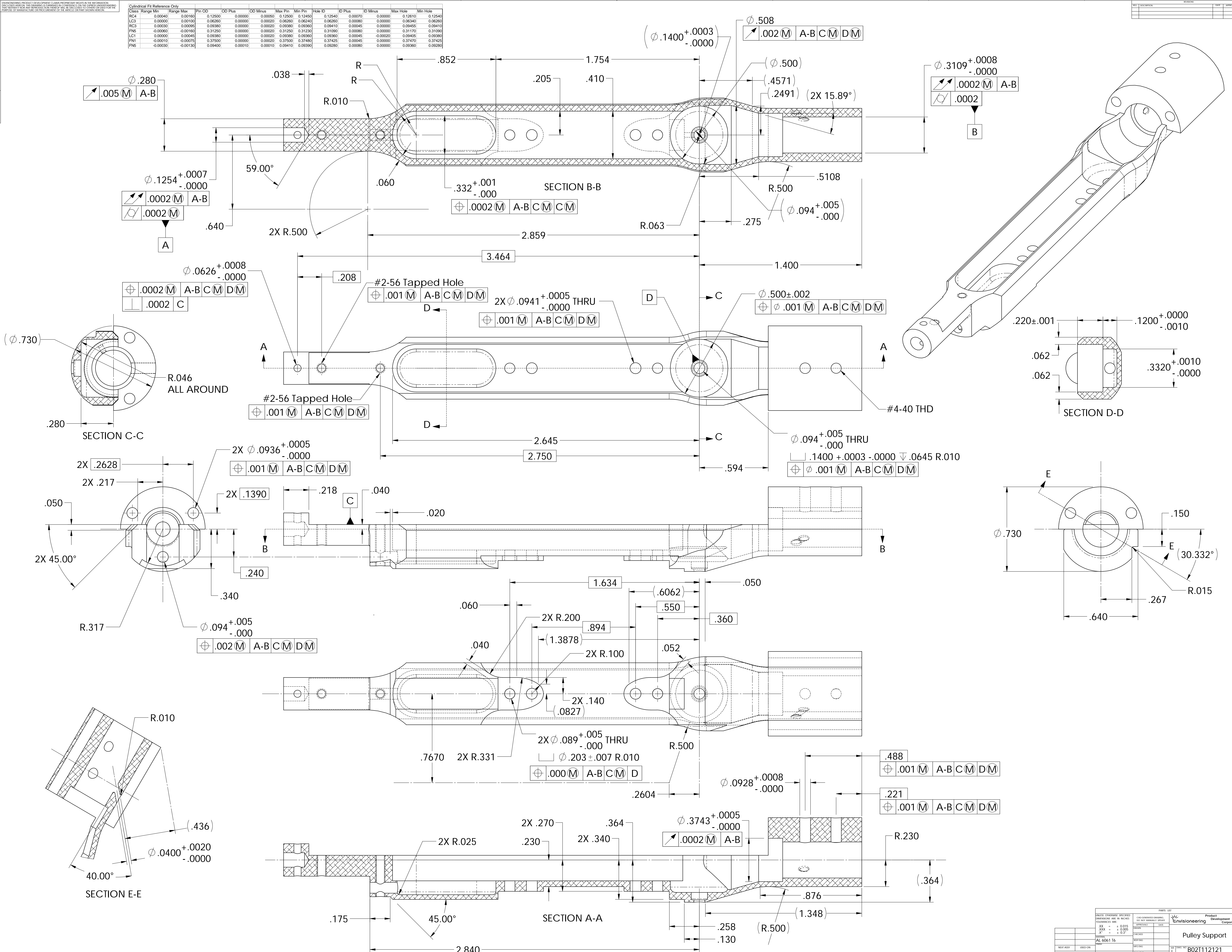
R.0160 Round edge all around both sides

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		.XXX	= ± 0.005	DRAWN	
		.X°	= ± 0.3°	CHECKED	
		MATERIAL		RESP ENG	
		FINISH		MFG ENG	
NEXT ASSY	USED ON	APPLICATION	DO NOT SCALE DRAWING	QUAL ENG	

Product Development Corporation	
Coupler spindle mount	
SCALE 10:1	DWG. NO. B02T112041
CAD FILE B02T112041	REV. A
SHEET 1 OF 1	

8 7 6 5 4 3 2 1

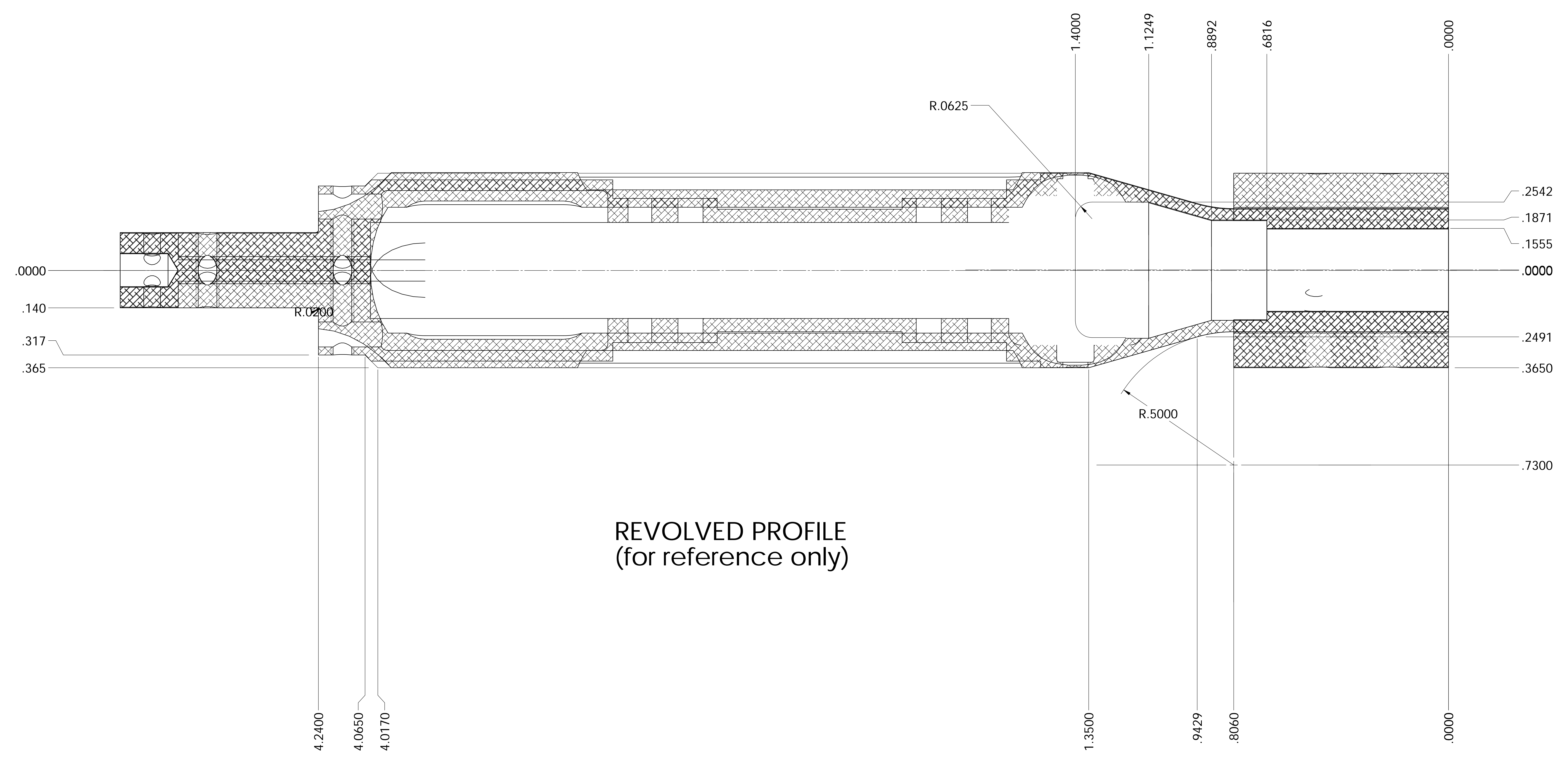
Cylindrical Fit Reference Only														
Class	Range	Min	Range	Max	Pin OD	OD Plus	OD Minus	Max Pin	Min Pin	Hole ID	ID Plus	ID Minus	Max Hole	Min Hole
RC4	0.00040	0.00100	0.12500	0.00000	0.00000	0.00000	0.00000	0.12500	0.12450	0.12540	0.00070	0.00000	0.12610	0.12540
LC3	0.00000	0.00100	0.06250	0.00000	0.00000	0.00000	0.06250	0.06240	0.06260	0.06280	0.00080	0.00000	0.06340	0.06260
RC3	0.00030	0.00095	0.09380	0.00000	0.00020	0.00000	0.09380	0.09360	0.09390	0.09410	0.00045	0.00000	0.09455	0.09410
FN5	-0.00060	-0.00160	0.31250	0.00000	0.00020	0.31250	0.31230	0.31260	0.31290	0.31300	0.00060	0.00000	0.31370	0.31290
LC1	0.00000	0.00045	0.09380	0.00000	0.00020	0.09380	0.09360	0.09390	0.09405	0.09420	-0.00020	0.00045	0.09405	0.09360
FN1	-0.00010	-0.00075	0.37500	0.00000	0.00020	0.37500	0.37480	0.37490	0.37425	0.37425	0.00045	0.00000	0.37470	0.37425
FN5	-0.00030	-0.00130	0.09380	0.00000	0.00010	0.09380	0.09360	0.09390	0.09405	0.09420	0.00060	0.00000	0.09405	0.09360



PARTS LIST		PARTS LIST	
QUANTITY	DESCRIPTION	QUANTITY	DESCRIPTION
1	PULLEY SUPPORT	1	PULLEY SUPPORT

DATE: 11/15/11
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 TITLE: Pulley Support
 SCALE: 1:1
 SHEET: 1 OF 1

PROVIDER'S PRODUCT DEVELOPMENT CLAIMS OFFICE BY THE REVISIONS.
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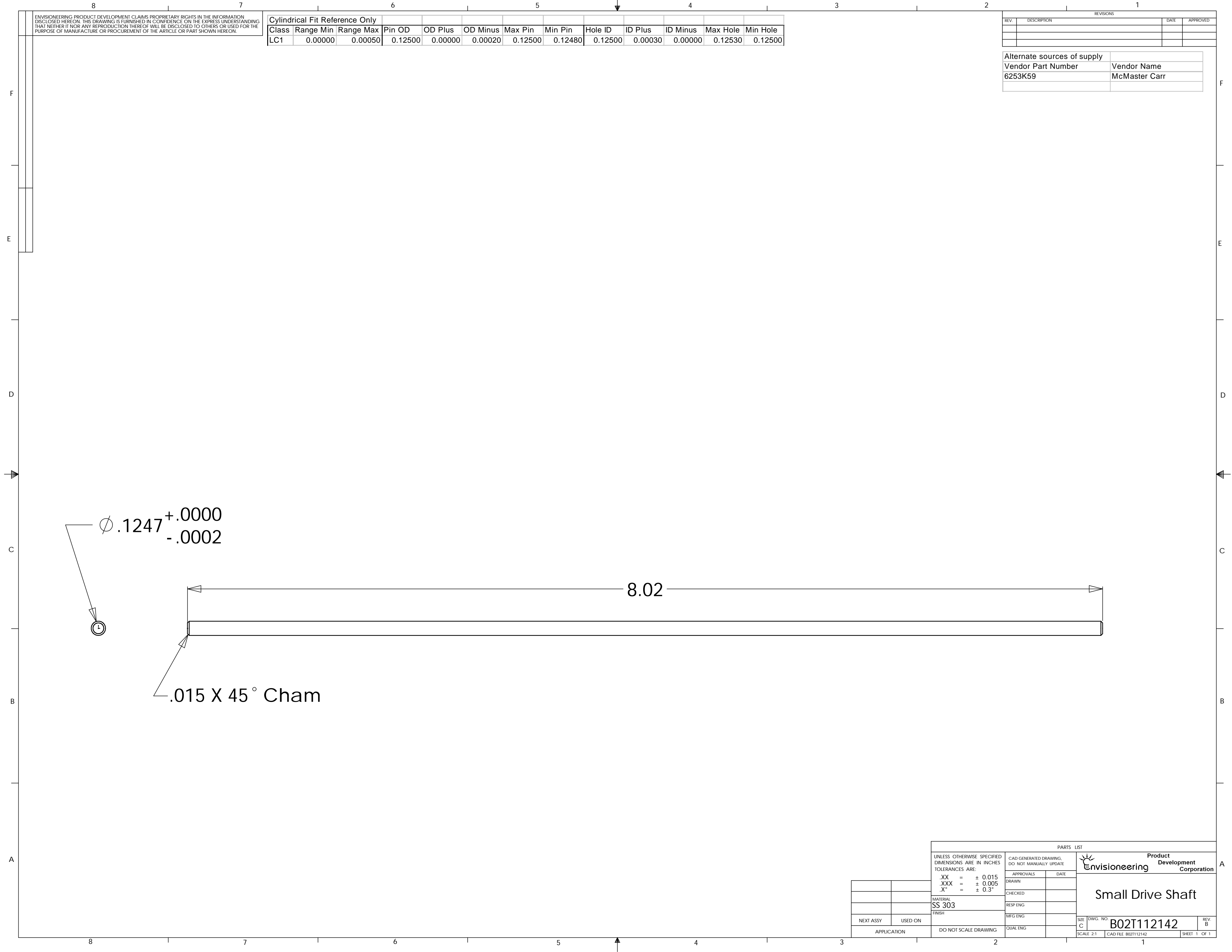
REVOLVED PROFILE
(for reference only)

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Cylindrical Fit Reference Only												
Class	Range Min	Range Max	Pin OD	OD Plus	OD Minus	Max Pin	Min Pin	Hole ID	ID Plus	ID Minus	Max Hole	Min Hole
LC1	0.00000	0.00050	0.12500	0.00000	0.00020	0.12500	0.12480	0.12500	0.00030	0.00000	0.12530	0.12500

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

Alternate sources of supply	
Vendor Part Number	Vendor Name
6253K59	McMaster Carr



PARTS LIST		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE	
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		.XXX	= ± 0.005	DRAWN	
		.X°	= ± 0.3°	CHECKED	
		MATERIAL	SS 303	RESP ENG	
		FINISH		MFG ENG	
NEXT ASSY	USED ON	APPLICATION	DO NOT SCALE DRAWING	QUAL ENG	

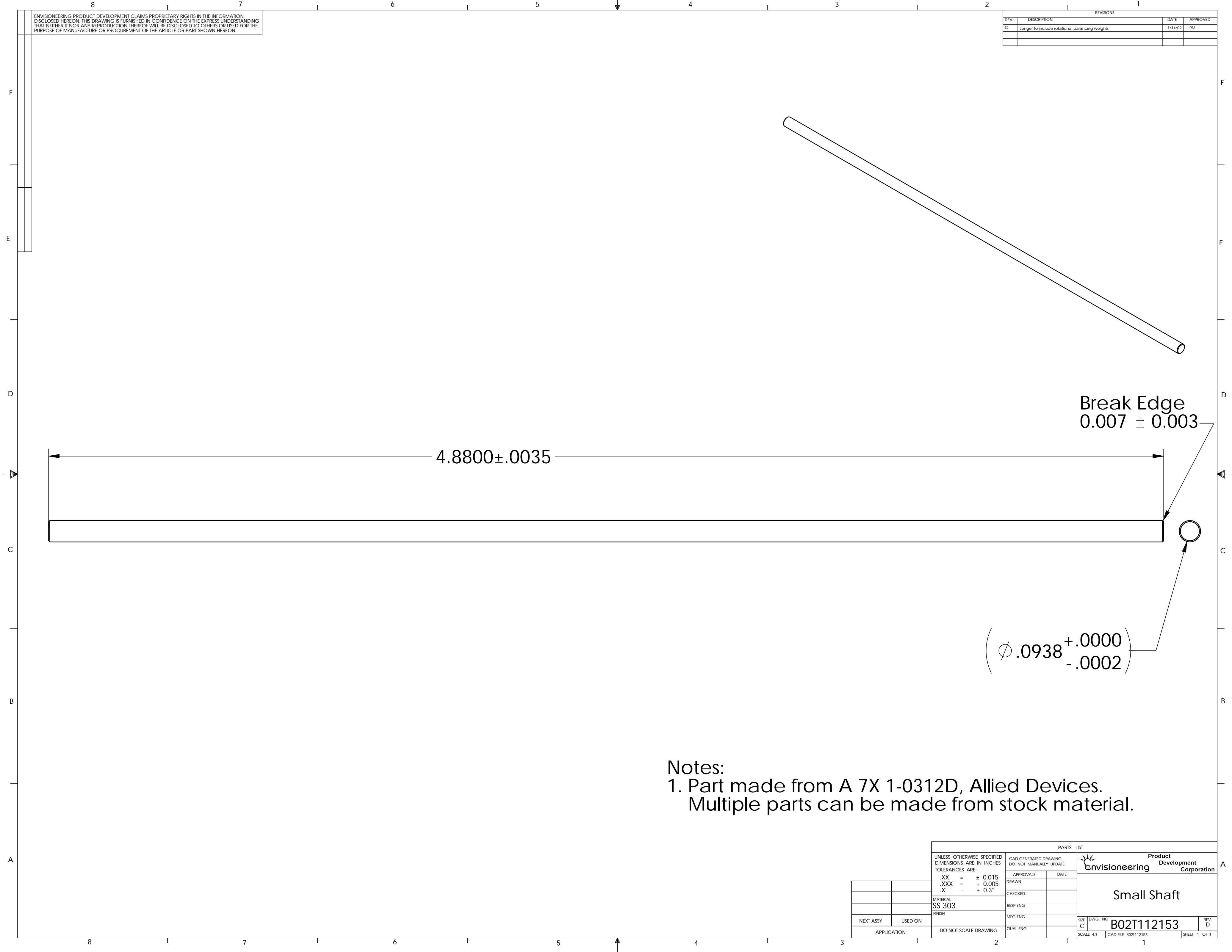
Product Development Corporation

Small Drive Shaft

SCALE: 2:1 DWG. NO: **B02T112142** SHEET 1 OF 1

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
C	Longer to include rotational balancing weights	1/14/02	RM



Break Edge
0.007 ± 0.003

4.8800 ± .0035

(φ .0938 +.0000 / -.0002)

Notes:
1. Part made from A 7X 1-0312D, Allied Devices.
Multiple parts can be made from stock material.

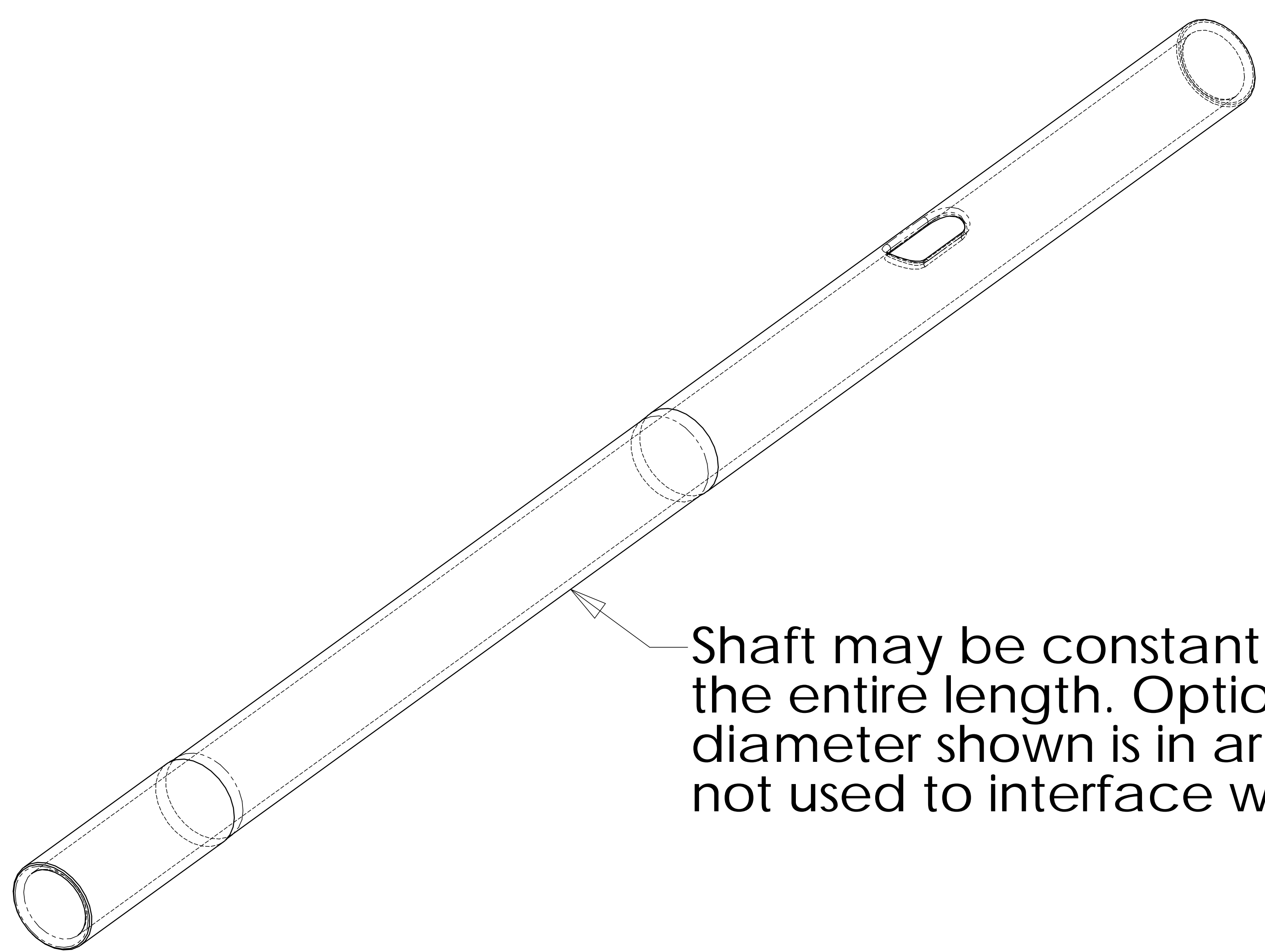
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TOLERANCES ARE:		APPROVALS DATE	
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.XXX	= ± 0.005	CHECKED	
.X"	= ± 0.3"	RESP ENG	
MATERIAL	SS 303	MFG ENG	
FINISH		QUAL ENG	
NEXT ASSY	USED ON	SCALE 4:1 CAD FILE B02T112153 SHEET 1 OF 1	
APPLICATION	DO NOT SCALE DRAWING	DWG. NO. B02T112153 REV. D	

Product Development Corporation
Envisioneering

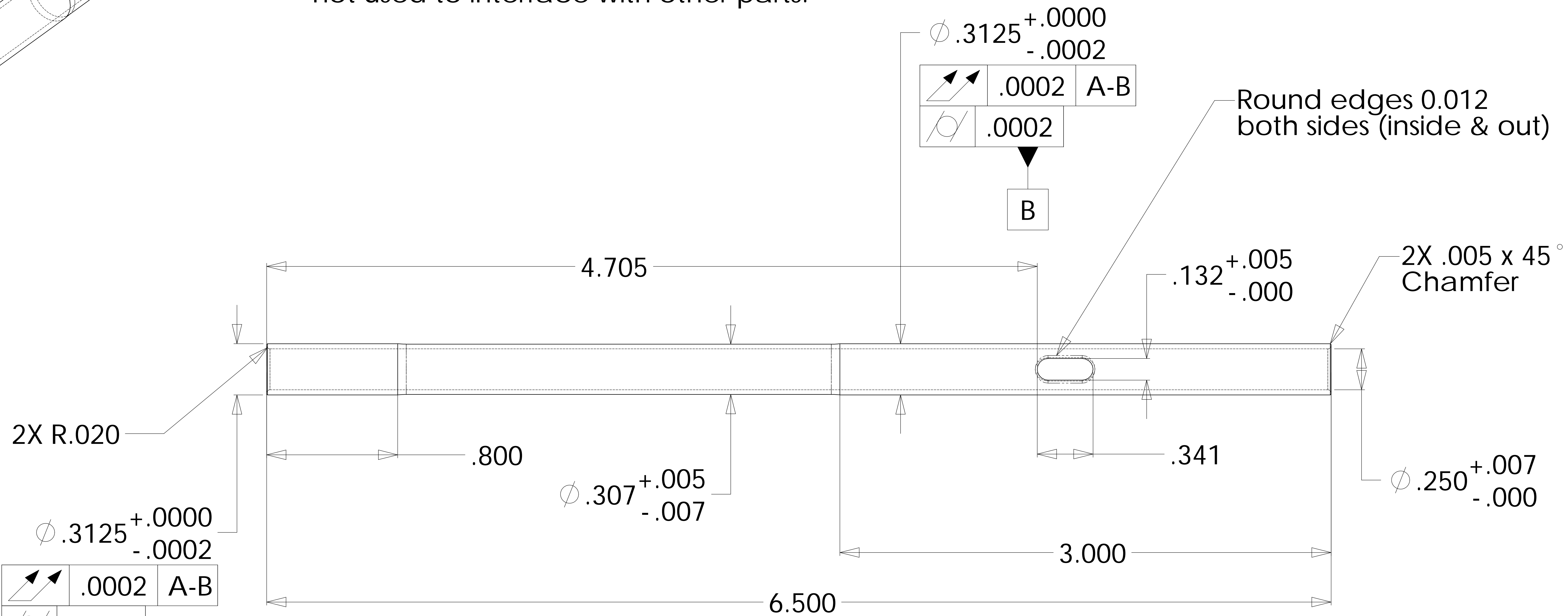
Small Shaft

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



Shaft may be constant diameter for the entire length. Optional reduced diameter shown is in area that is not used to interface with other parts.

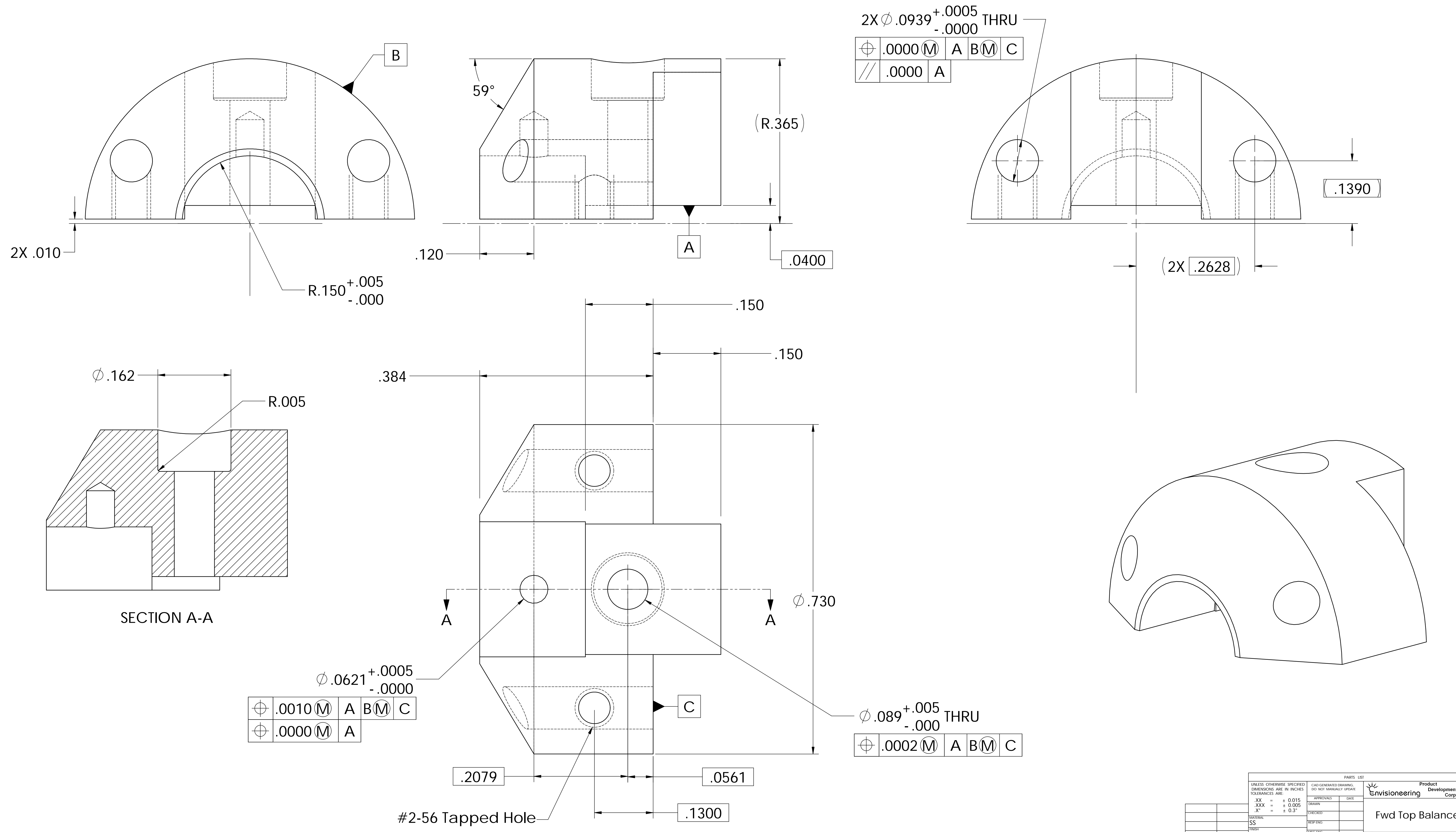


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.XX	= ± 0.015	APPROVALS	DATE	Product Development Corporation	
.XXX	= ± 0.005	DRAWN		Invisioneering	
.X°	= ± 0.3°	CHECKED		Outer Drive Shaft	
MATERIAL	SS	RESP ENG		SIZE	DWG. NO. B02T112159
FINISH		MFG ENG		SCALE	2:1
NEXT ASSY	USED ON	QUAL ENG		CAD FILE	B02T112159
APPLICATION					SHEET 1 OF 1

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Cylindrical Fit Reference Only												
Class	Range Min	Range Max	Pin OD	OD Plus	OD Minus	Max Pin	Min Pin	Hole ID	ID Plus	ID Minus	Max Hole	Min Hole
FN1	-0.00005	-0.00050	0.06260	0.00000	0.00020	0.06260	0.06240	0.06210	0.00025	0.00000	0.06235	0.06210

REV	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:

XXX = ± 0.015
 .XXX = ± 0.005
 X" = ± 0.3"

APPROVALS

DATE	
CHECKED	
DESIGNED	
DRAWN	

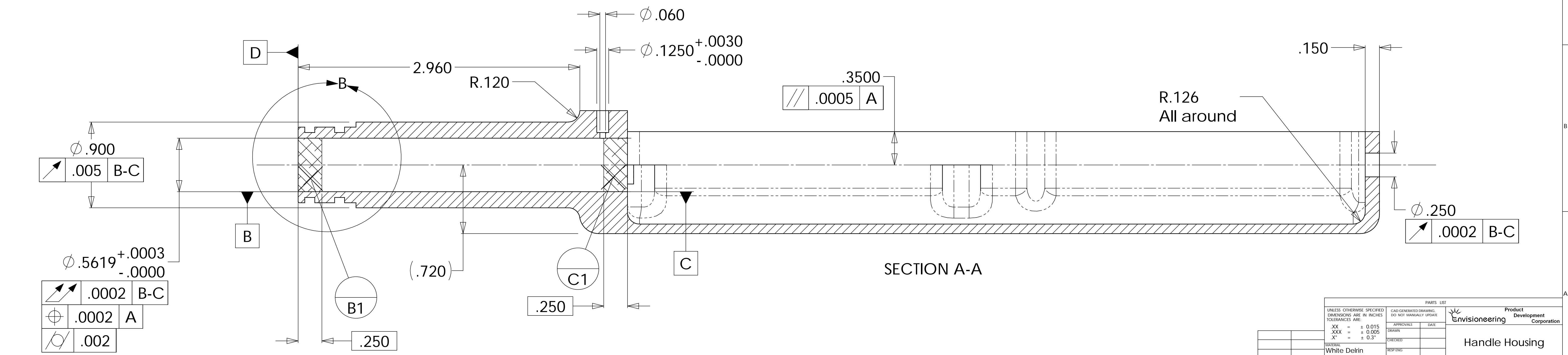
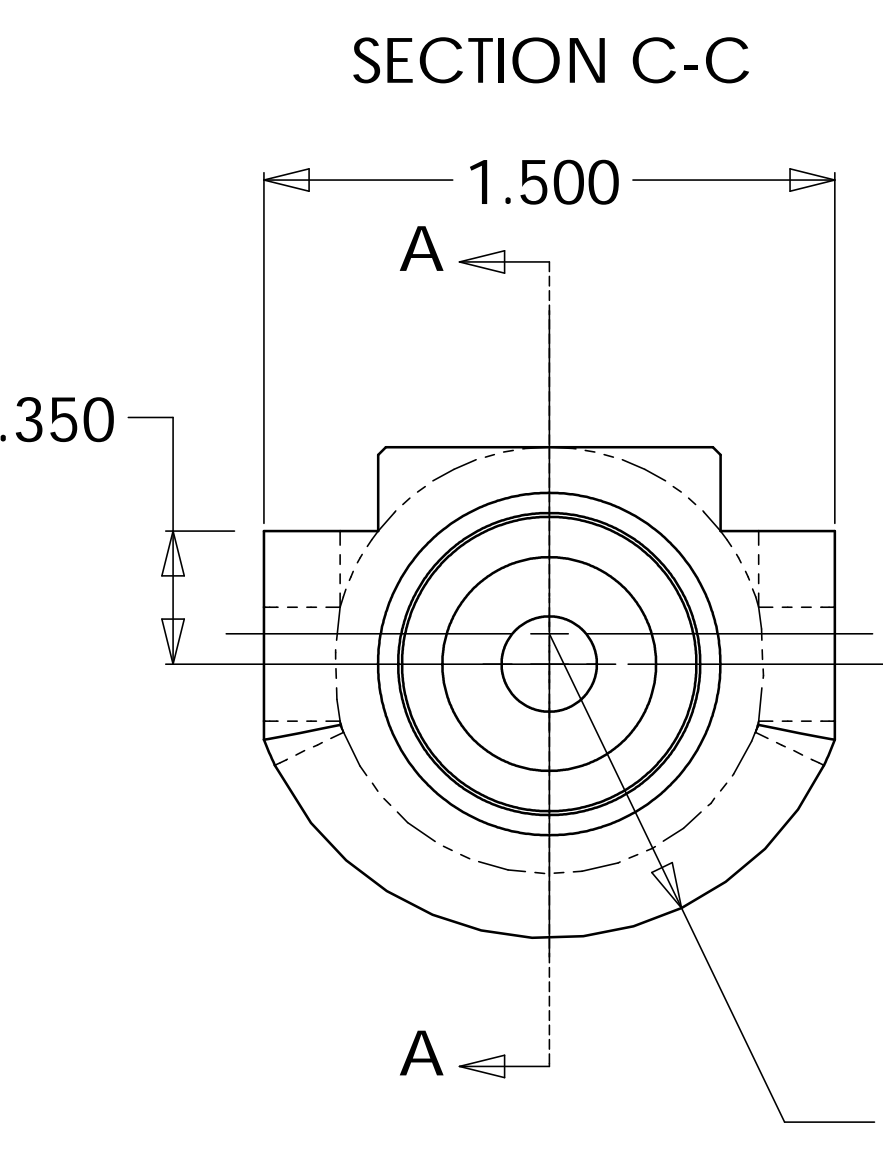
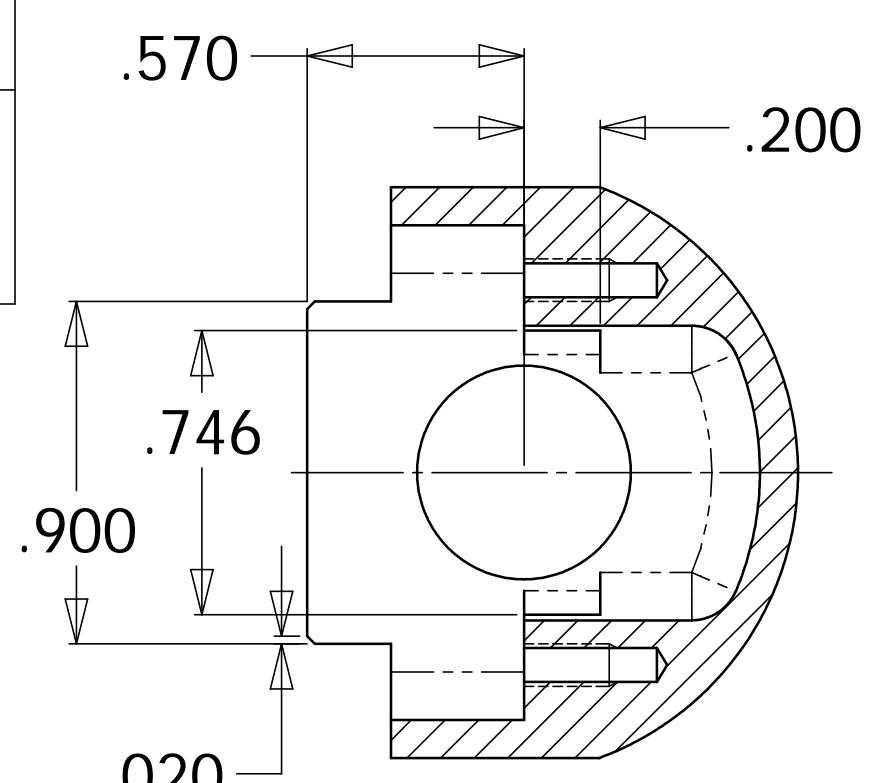
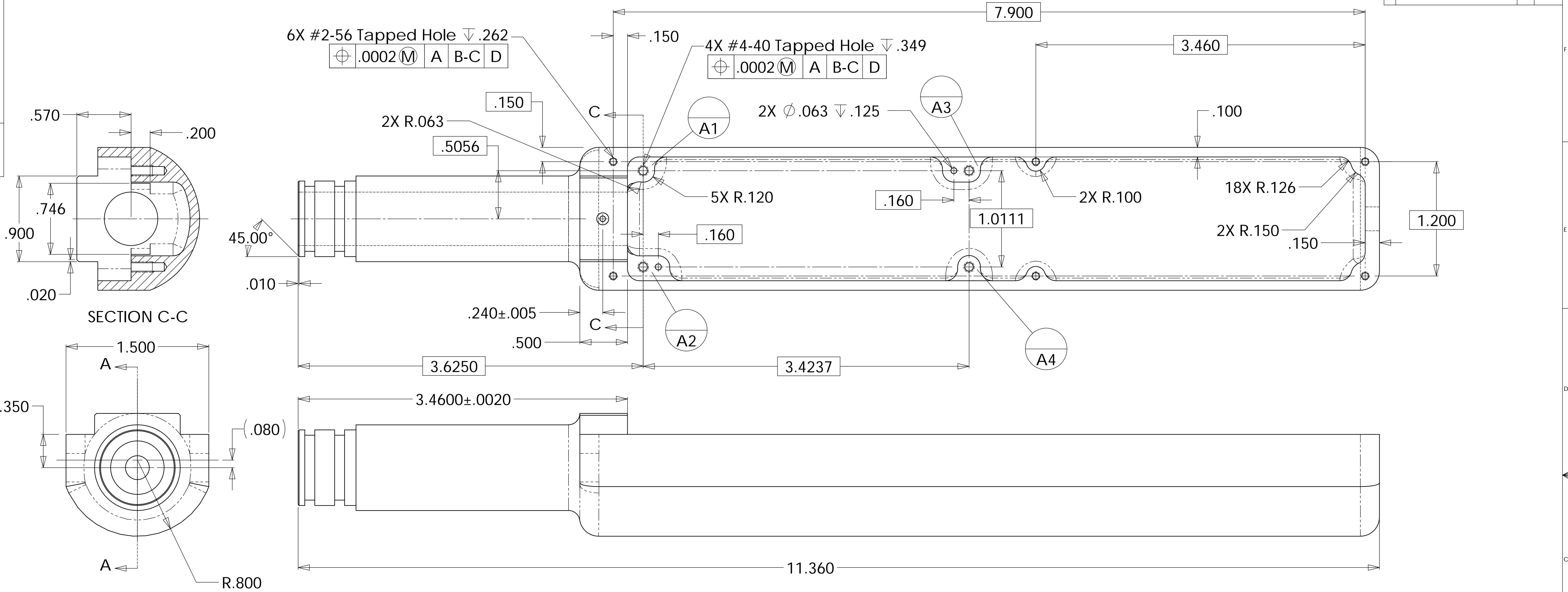
ENVISIONERING Product Development Corporation

Fwd Top Balancer

REV: A
 DWG NO: B02T112181
 SCALE: 10:1
 SHEET: 1 OF 1

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REV	DESCRIPTION	DATE	APPROVED



$\phi .5619^{+.0003}$ $-.0000$	$\phi .900$ $.005$ B-C
$\phi .0002$ A	$\phi .0002$ B-C
$\phi .002$	

PARTS LIST		APPROVALS		DATE	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:
 XX = ± 0.015
 XXX = ± 0.005
 X* = ± 0.3"

White Delrin

SCALE 2:1 CAD FILE B02122210

Product Development Corporation

Handle Housing

REV B

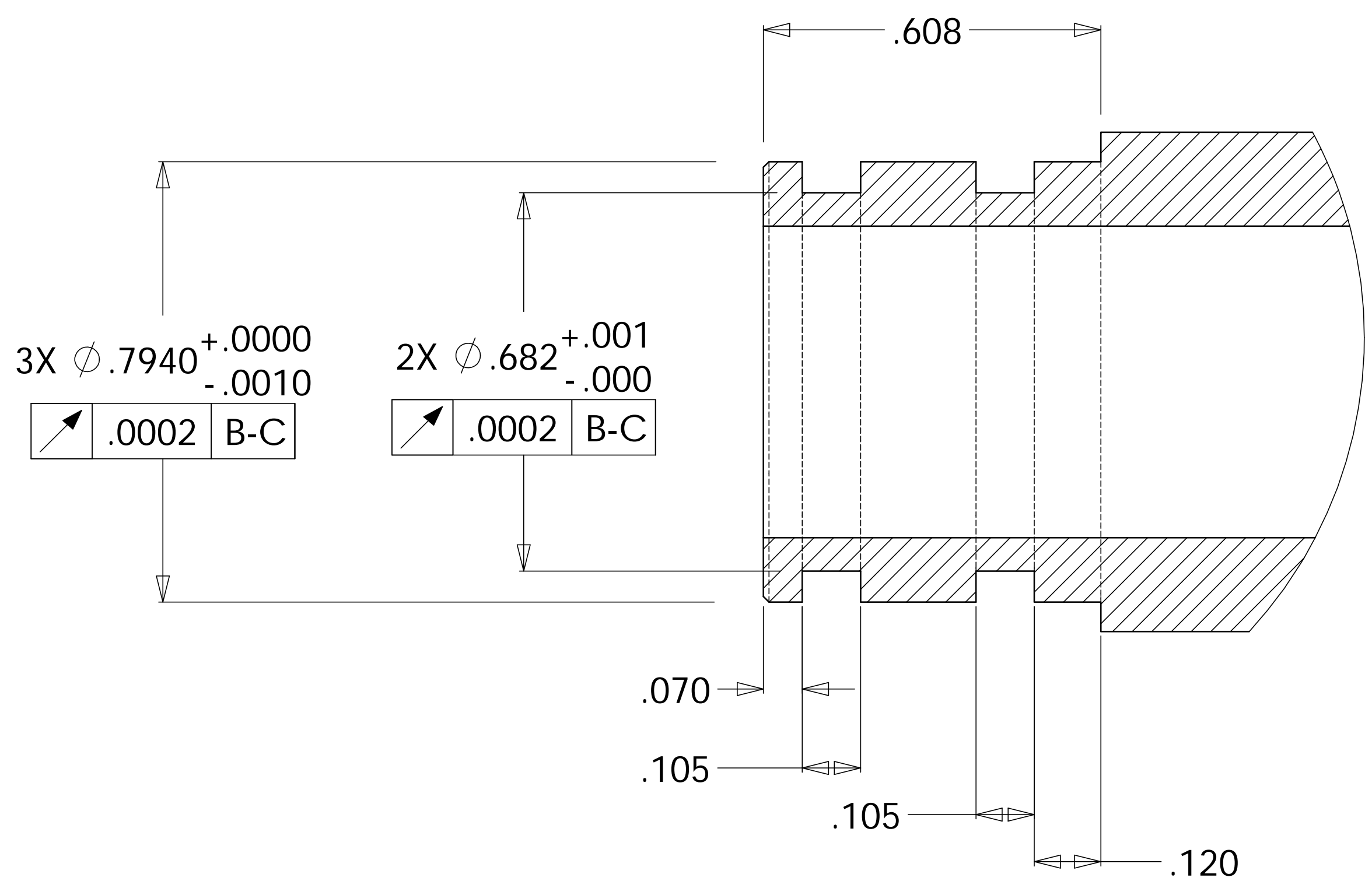
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SCALE 2:1

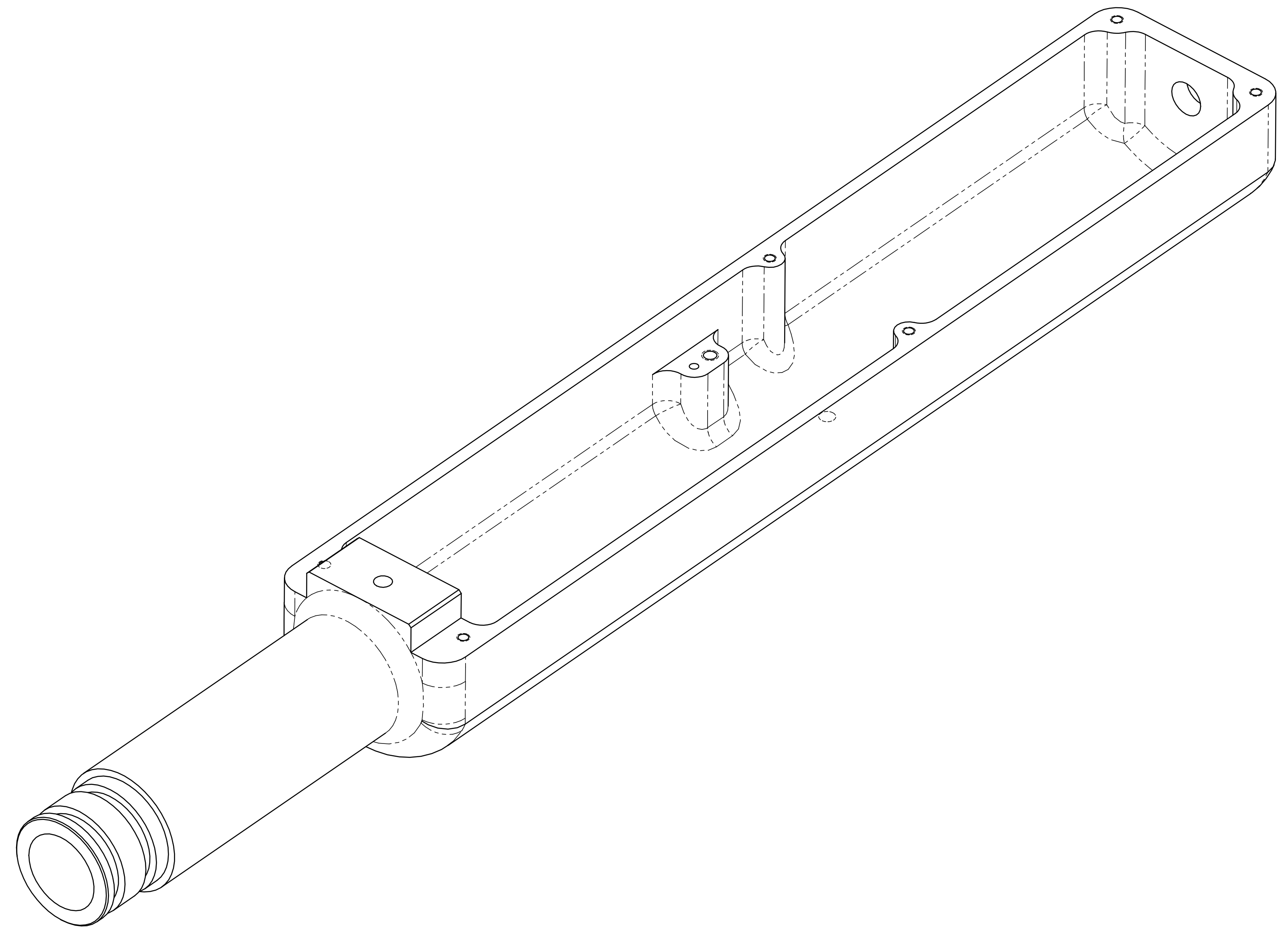
1 OF 2

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Cylindrical Fit Reference Only												
Class	Range Min	Range Max	Pin OD	OD Plus	OD Minus	Max Pin	Min Pin	Hole ID	ID Plus	ID Minus	Max Hole	Min Hole
FN1	-0.00010	-0.00080	0.50000	0.00000	0.00020	0.50000	0.49980	0.49920	0.00050	0.00000	0.49970	0.49920
RC4	0.00080	0.00280	0.79400	0.00000	0.00100	0.79400	0.79300	0.79480	0.00100	0.00000	0.79580	0.79480

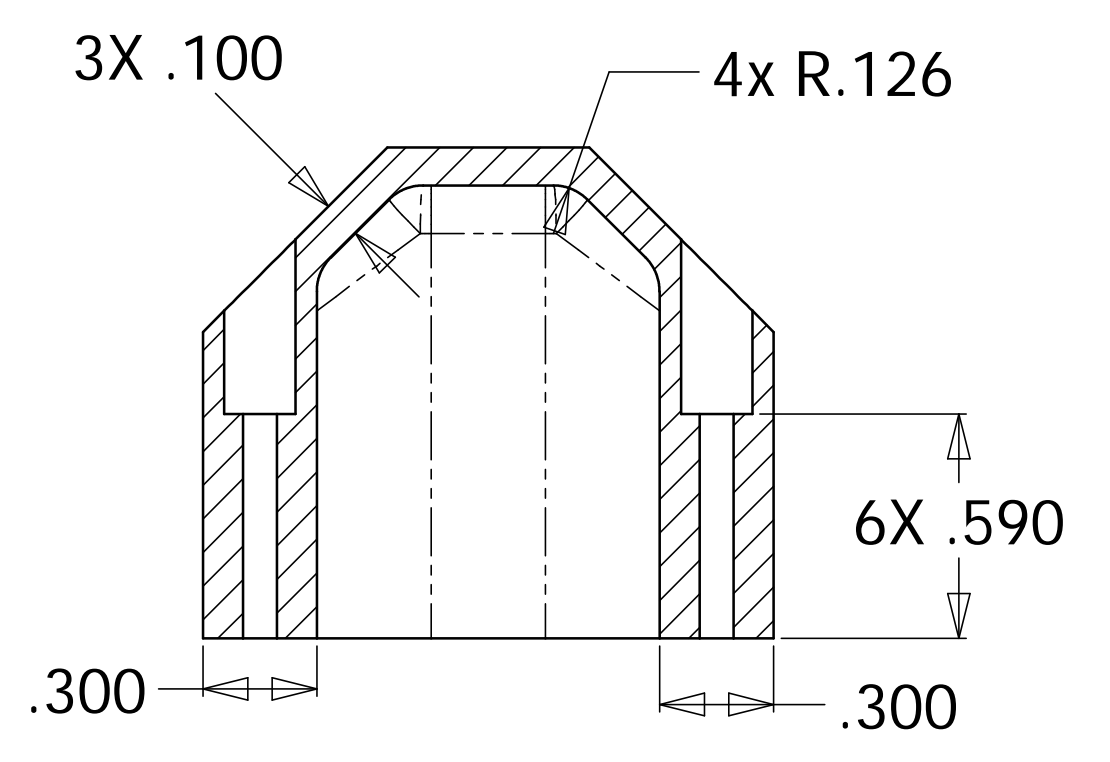


DETAIL B
SCALE 5 : 1

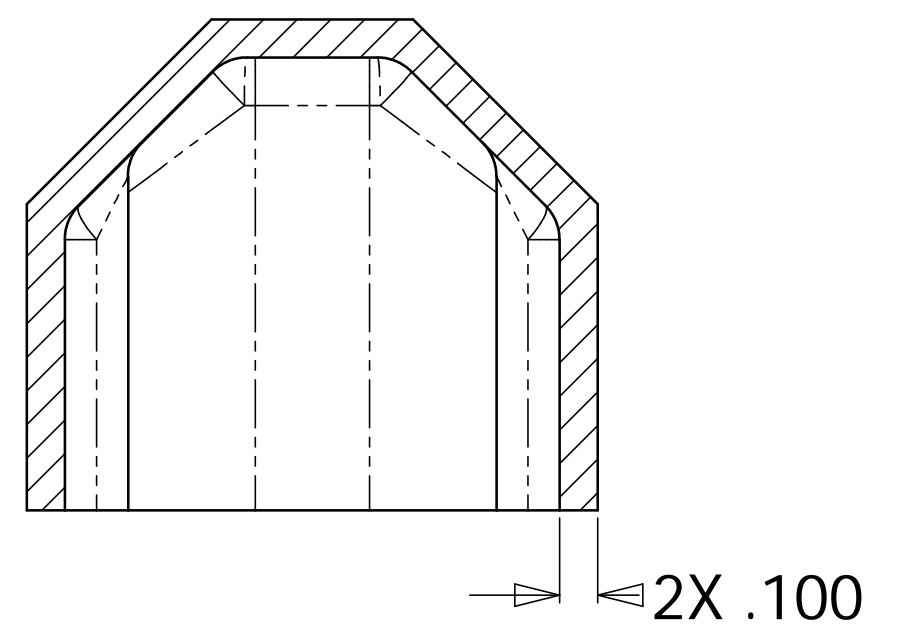


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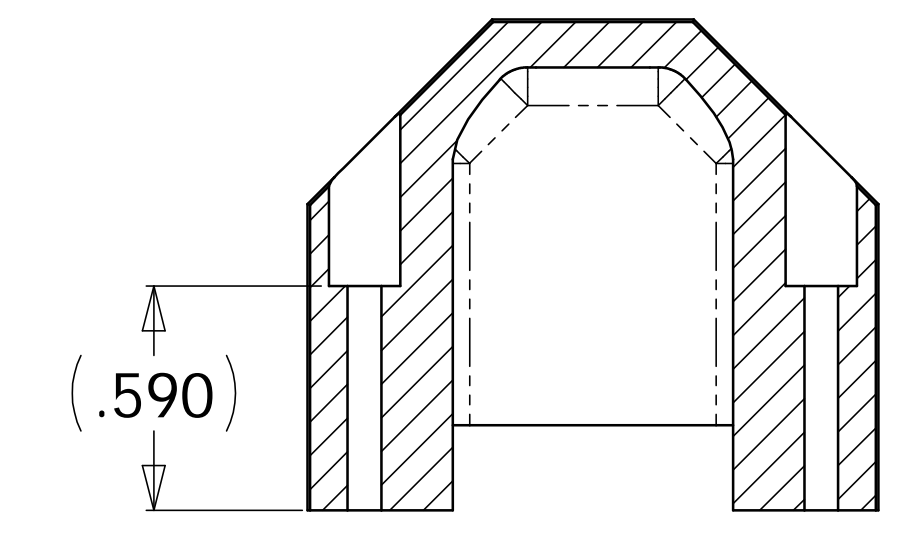
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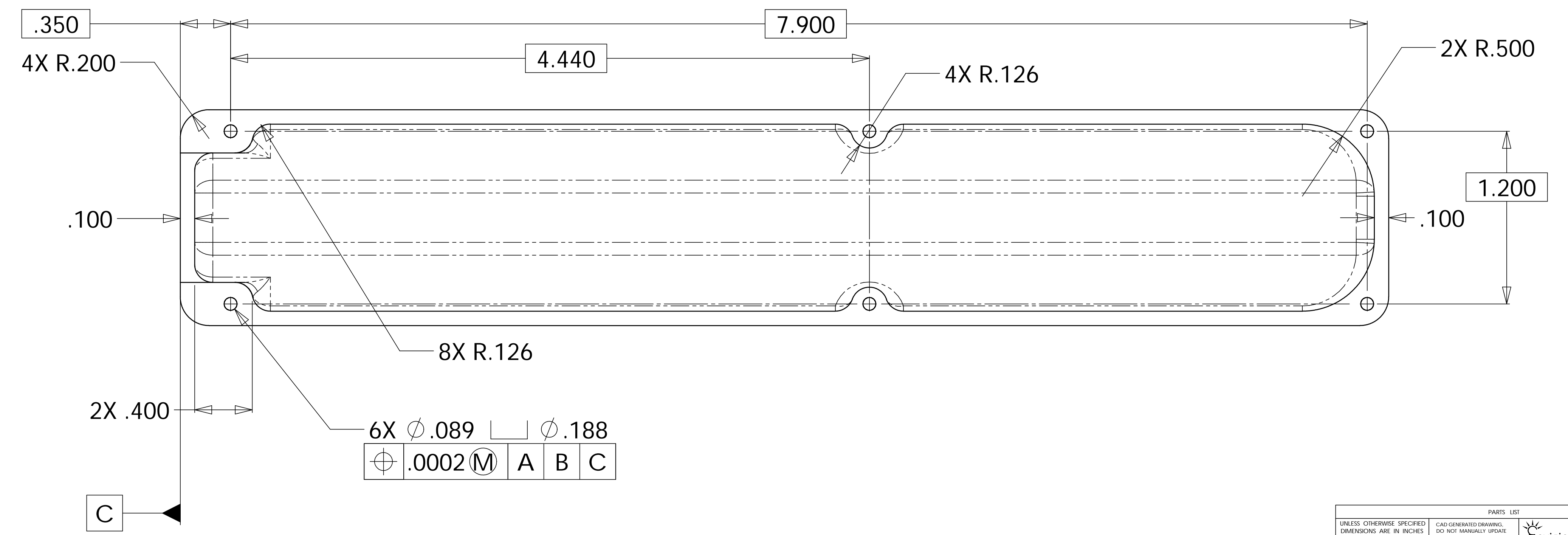
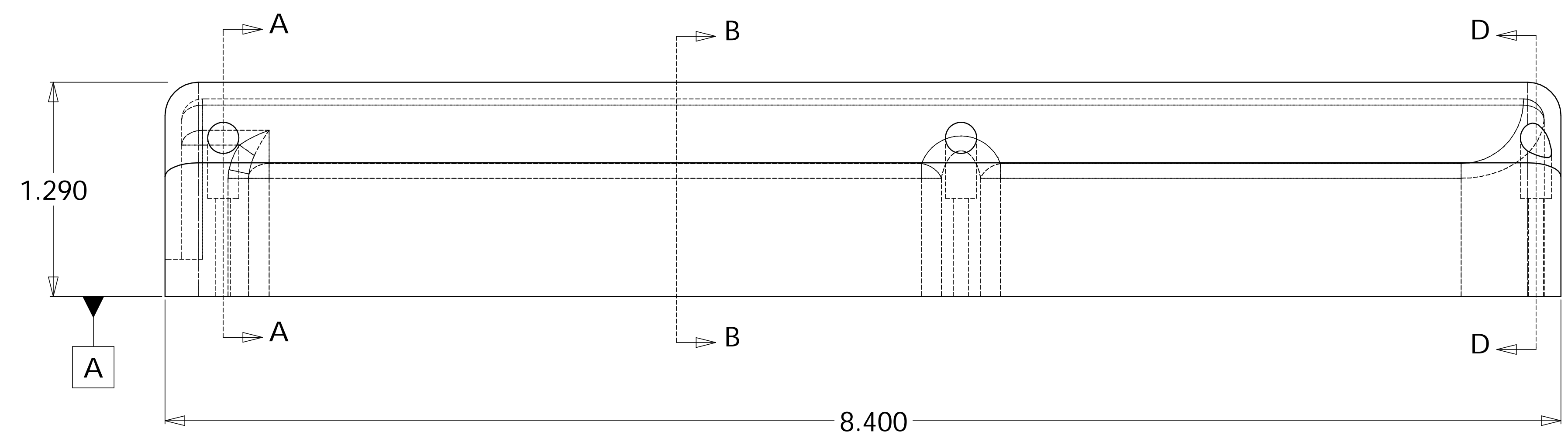
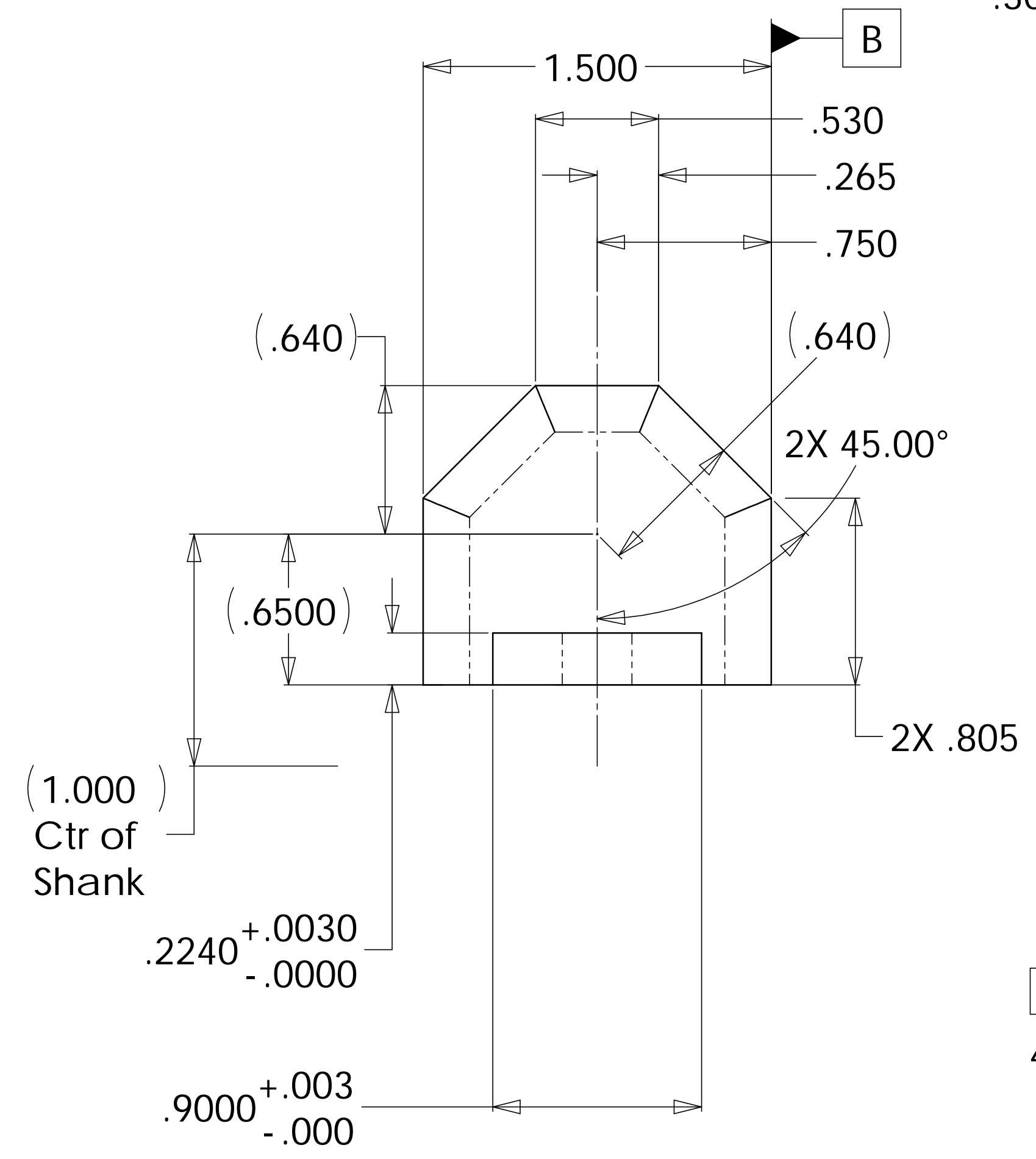
SECTION A-A
SCALE 2 : 1



SECTION B-B
SCALE 2 : 1



SECTION D-D
SCALE 2 : 1



PARTS LIST		APPROVALS		DATE	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: .XX = ± 0.015, .XXX = ± 0.005, * = ± 0.3".

White Delrin

Product Development Corporation

Handle Cover

REV: A

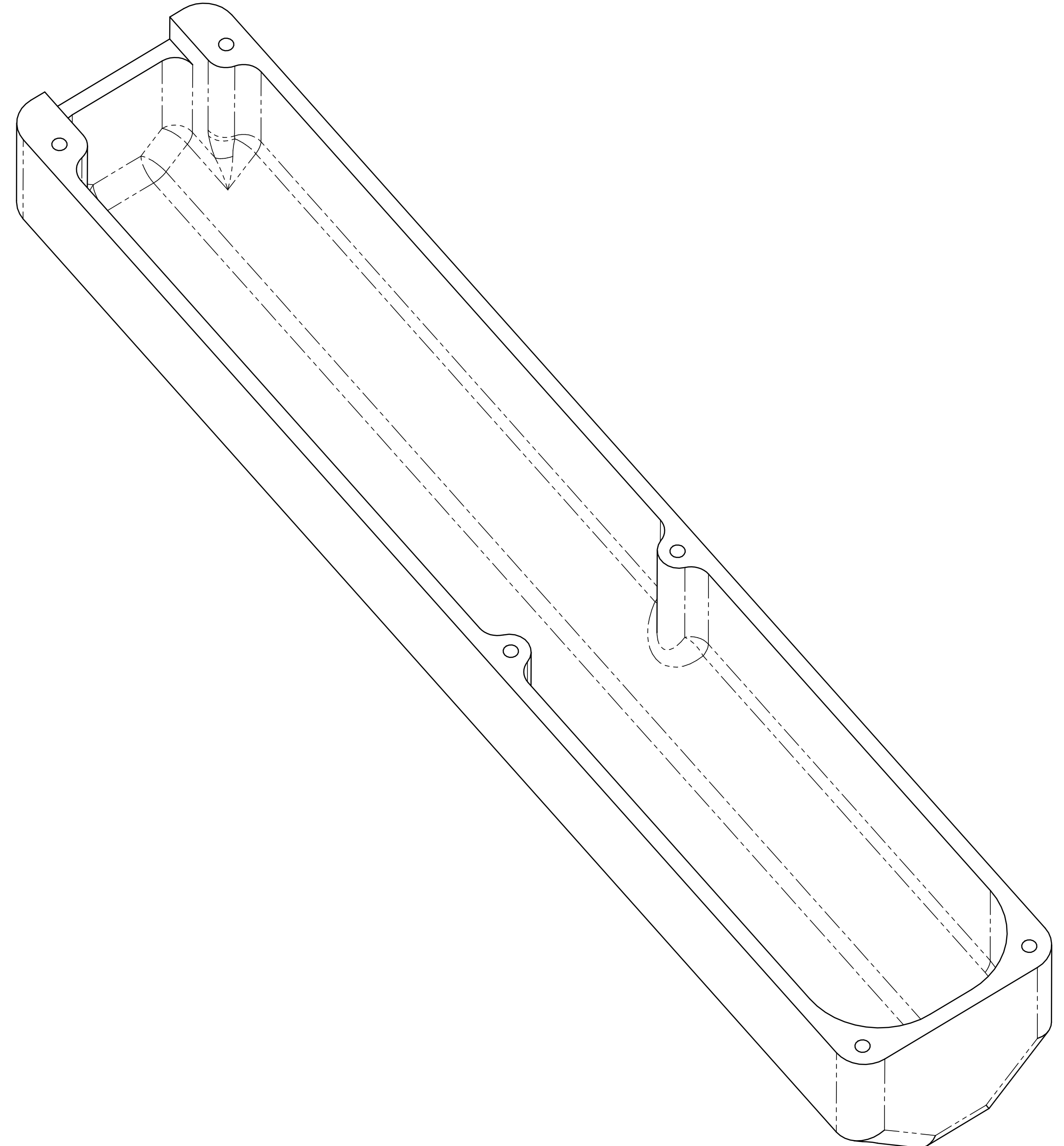
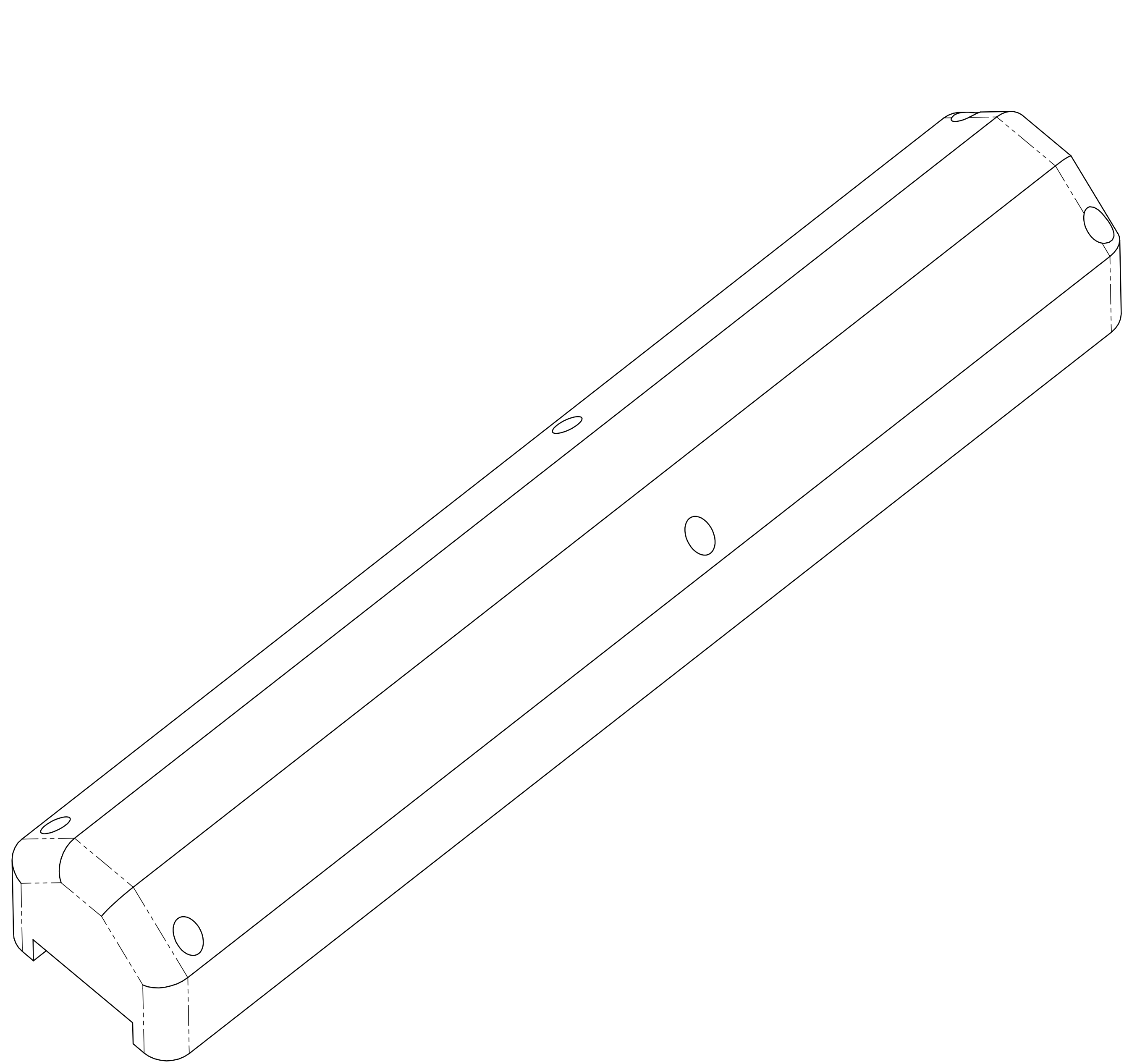
DWG NO: B02T122211

SCALE: 1:1

SHEET: 1 OF 2

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REV		DESCRIPTION	DATE	APPROVED



PARTS LIST		APPROVALS		DATE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 TOLERANCES ARE:
 .XX = ± 0.015
 .XXX = ± 0.005
 X" = ± 0.3"

White Delrin

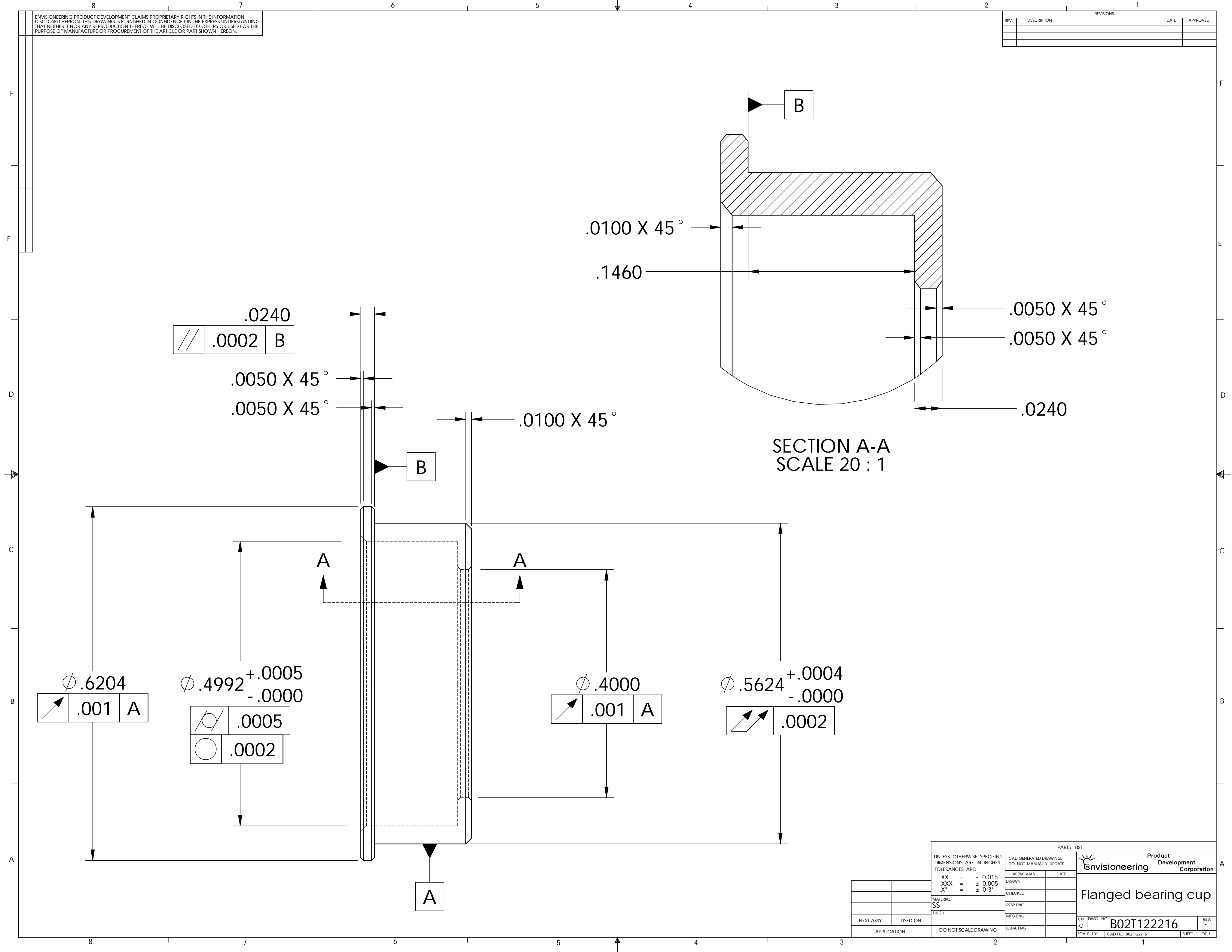
Product Development Corporation
Handle Cover
 DWG NO: B02T122211
 REV: A
 SHEET 2 OF 2

APPLICATION	USED ON

SCALE: 2:1
 CAD FILE: B02T122211

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



SECTION A-A
SCALE 20 : 1

ϕ .6204
Surface texture symbol: $\sqrt{\text{ }}$.001 A

ϕ .4992 $\begin{matrix} +.0005 \\ -.0000 \end{matrix}$
Surface texture symbol: $\sqrt{\text{ }}$.0005
Circular runout symbol: \bigcirc .0002

ϕ .4000
Surface texture symbol: $\sqrt{\text{ }}$.001 A

ϕ .5624 $\begin{matrix} +.0004 \\ -.0000 \end{matrix}$
Surface texture symbol: $\sqrt{\text{ }}$.0002

PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE	
TOLERANCES ARE:		APPROVALS	
.XX = ± 0.015	.XXX = ± 0.005	DATE	
.X° = ± 0.3°		DRAWN	
MATERIAL	SS	CHECKED	
FINISH		RESP ENG	
NEXT ASSY	USED ON	MFG ENG	
APPLICATION	DO NOT SCALE DRAWING	QUAL ENG	
SCALE 10:1		DWG. NO. B02T122216	
CAD FILE B02T122216		REV. -	
SHEET 1 OF 1			

Envisionering Product Development Corporation

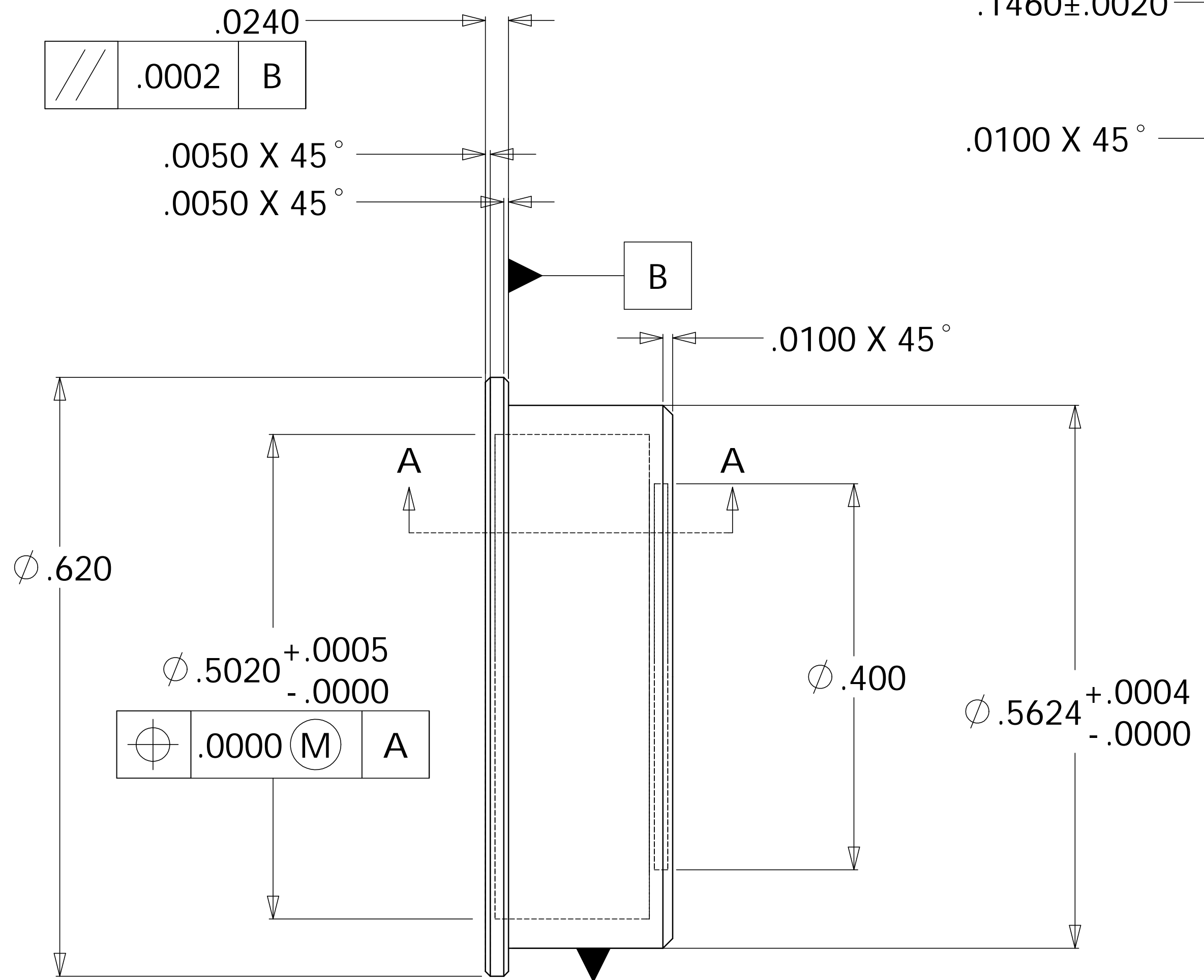
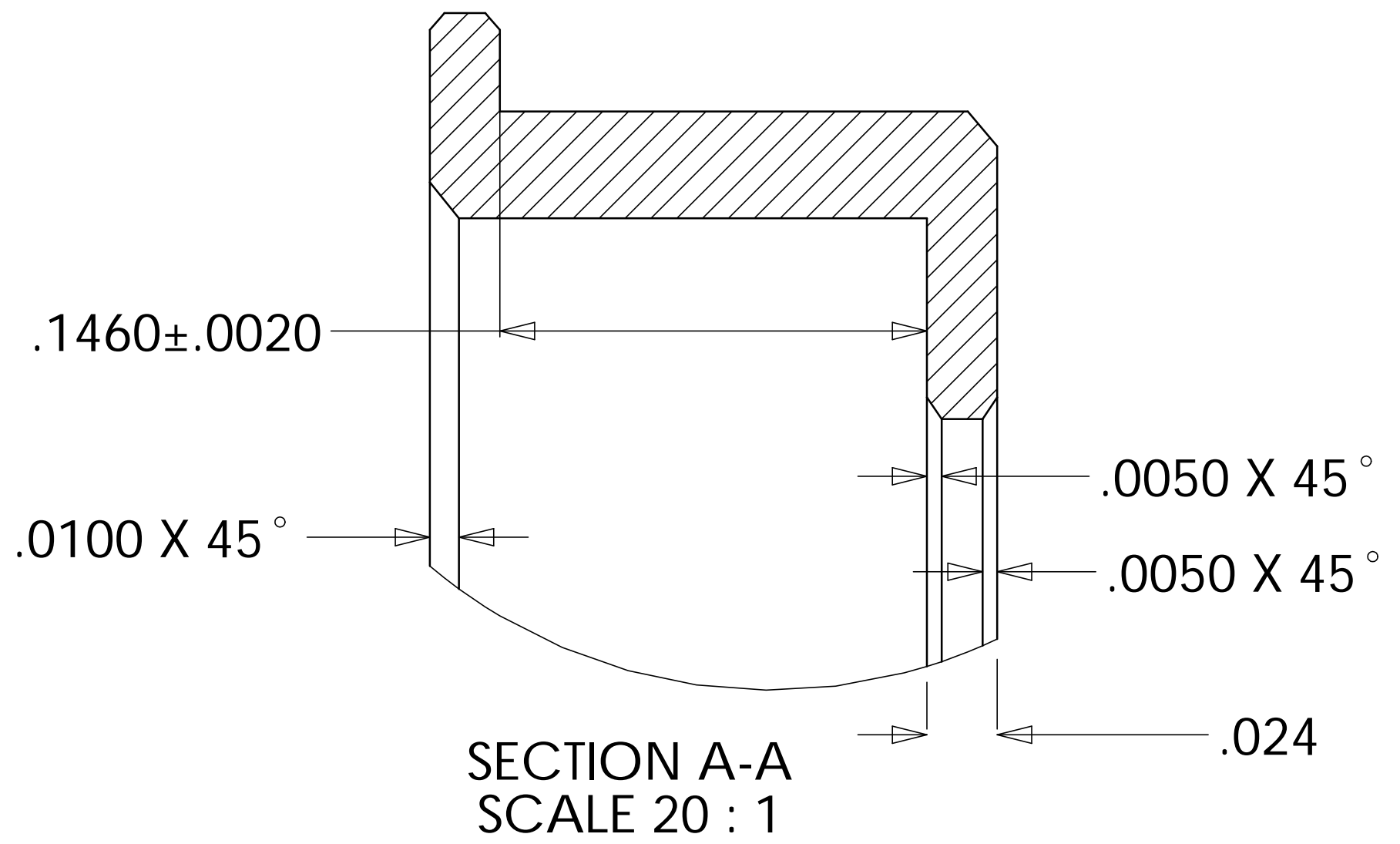
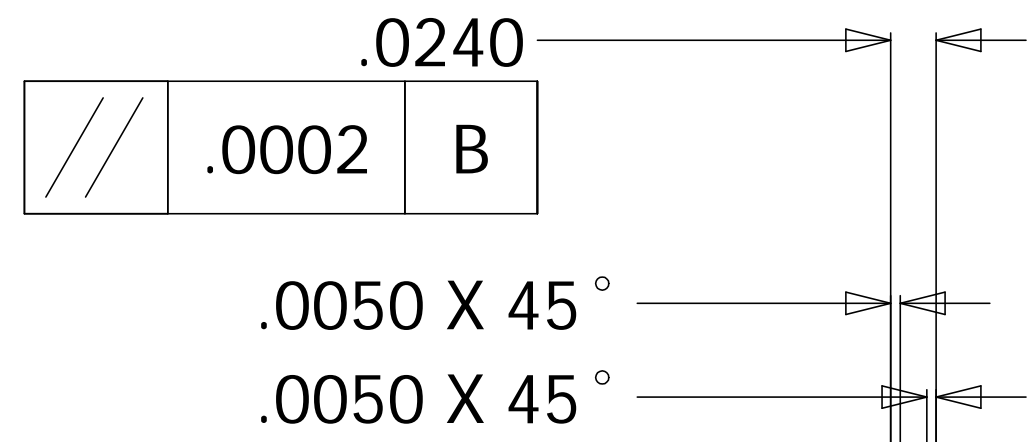
Flanged bearing cup

SCALE 10:1 DWG. NO. B02T122216 REV. -

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Cylindrical Fit Reference Only												
Class	Range Min	Range Max	Pin OD	OD Plus	OD Minus	Max Pin	Min Pin	Hole ID	ID Plus	ID Minus	Max Hole	Min Hole
FN1	-0.00020	-0.00090	0.56240	0.00040	0.00000	0.56280	0.56240	0.56190	0.00030	0.00000	0.56220	0.56190
FN1	-0.00010	-0.00080	0.50000	0.00000	0.00020	0.50000	0.49980	0.49920	0.00050	0.00000	0.49970	0.49920

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



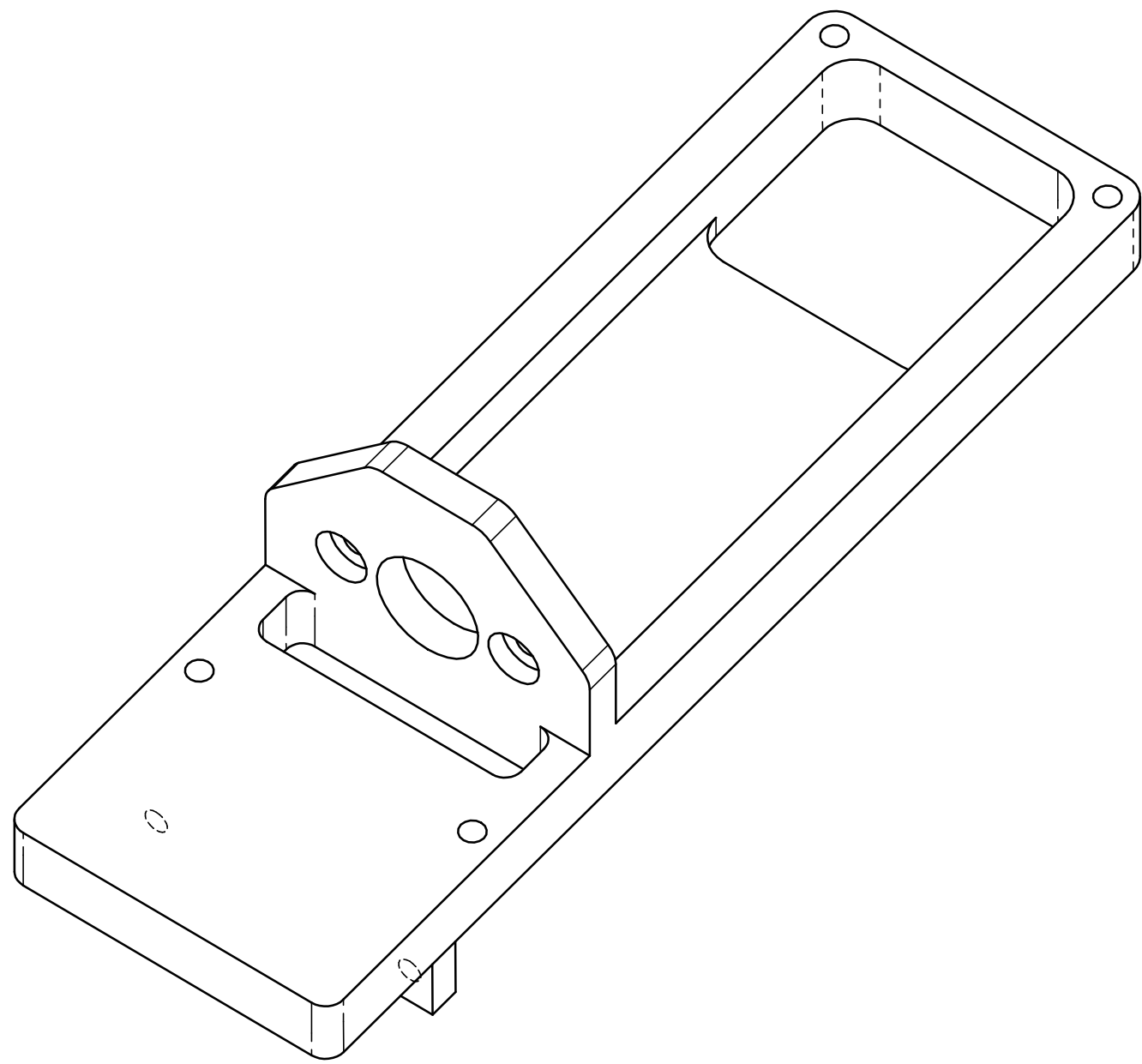
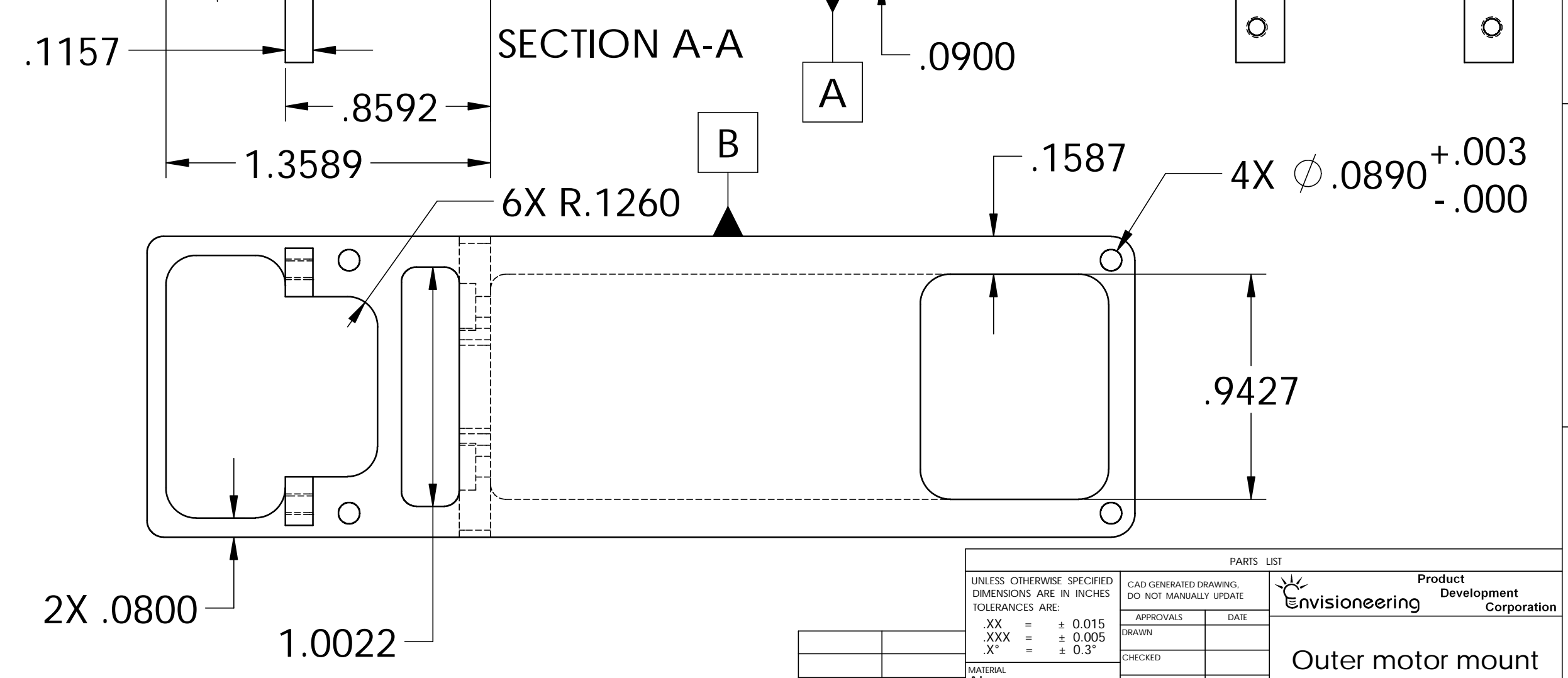
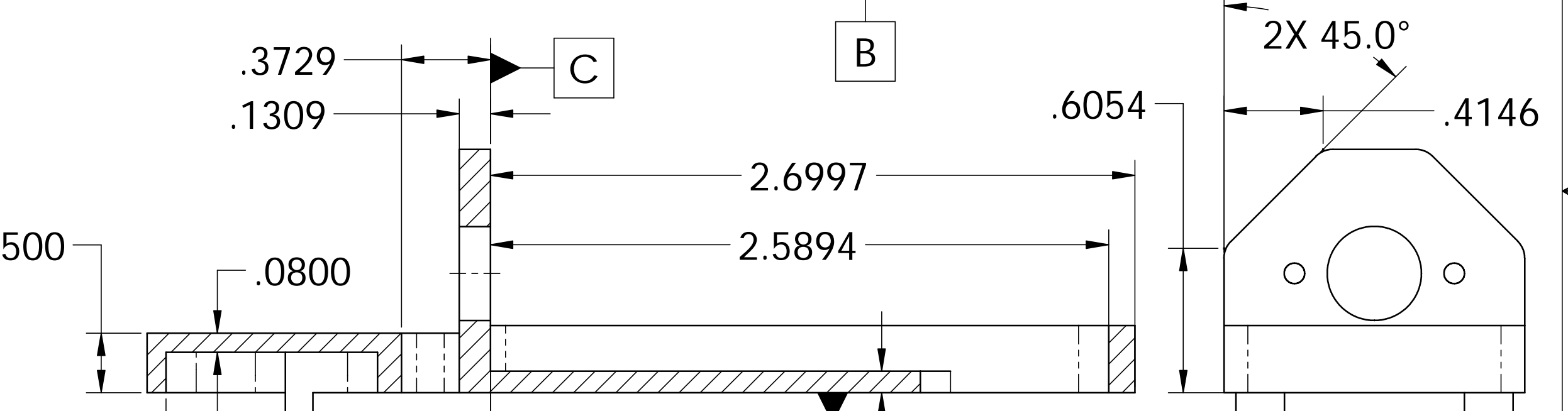
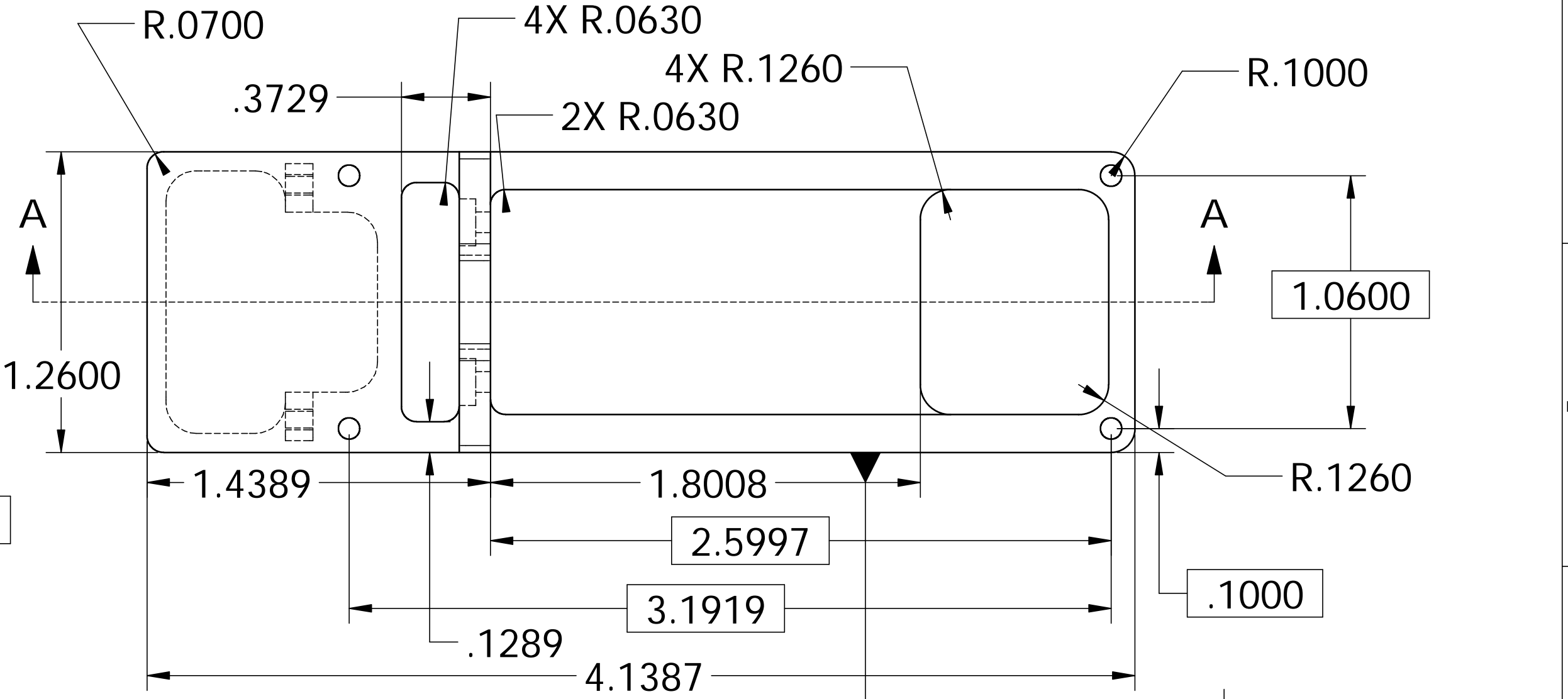
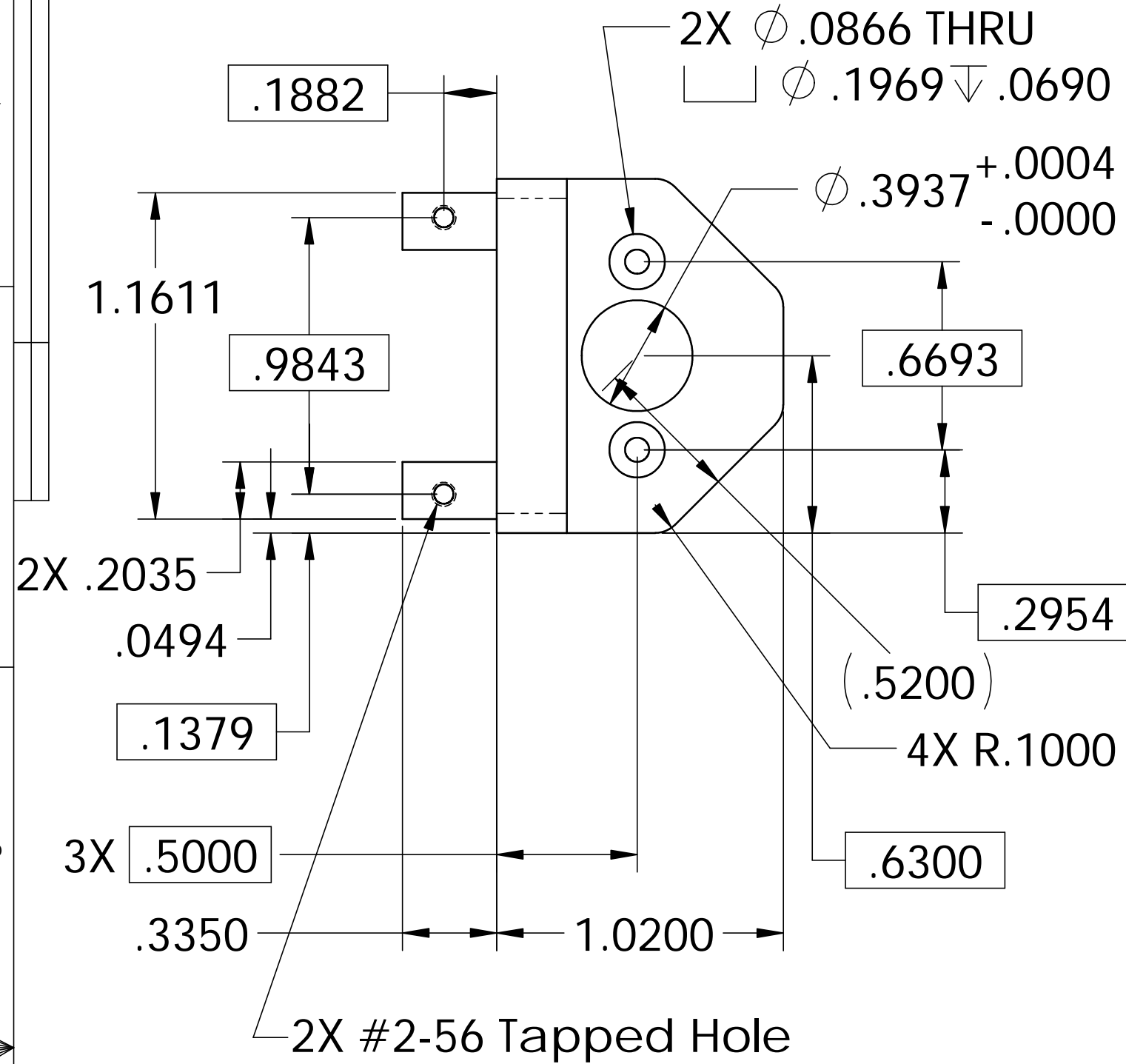
SECTION A-A
SCALE 20 : 1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: .XX = ± 0.015 .XXX = ± 0.005 .X° = ± 0.3°		CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE.	
MATERIAL: SS		APPROVALS: _____ DATE: _____	
FINISH: DO NOT SCALE DRAWING		DRAWN: _____	
NEXT ASSY: _____ USED ON: _____		CHECKED: _____	
APPLICATION: _____		RESP ENG: _____	
		MFG ENG: _____	
		QUAL ENG: _____	

PARTS LIST			
<h2>Flanged seal cup</h2>			
SIZE: C	DWG. NO: B02T122217	REV: -	
SCALE: 1:1	CAD FILE: B02T122217	SHEET: 1 OF 1	

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REV.	DESCRIPTION		



PARTS LIST		APPROVALS		DATE	
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NEXT ASSY	USED ON				
APPLICATION	DO NOT SCALE DRAWING				

Product Development Corporation
Envisionering
Outer motor mount
 DWG. NO. B02T122220
 SCALE 2:1 CAD FILE B02T122220 SHEET 1 OF 1